



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

: Confirmation No. 3379

Mitsuaki OSHIMA et al.

: Docket No. 2000_1422

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Serial No. 09/686,466

: Group Art Unit 2634

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: Examiner A. Le

Technology Center 2600

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SUBMISSION OF FORMAL DRAWINGS

Assistant Commissioner for Patents,
Washington, D.C.

Sir:

As required by the Examiner in the Office Action mailed April 9, 2002, 178 sheets of formal (8½ x 11) drawings (Figs. 1-179) are submitted herewith.

Respectfully submitted,

Mitsuaki OSHIMA et al.

By _____

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October 9, 2002

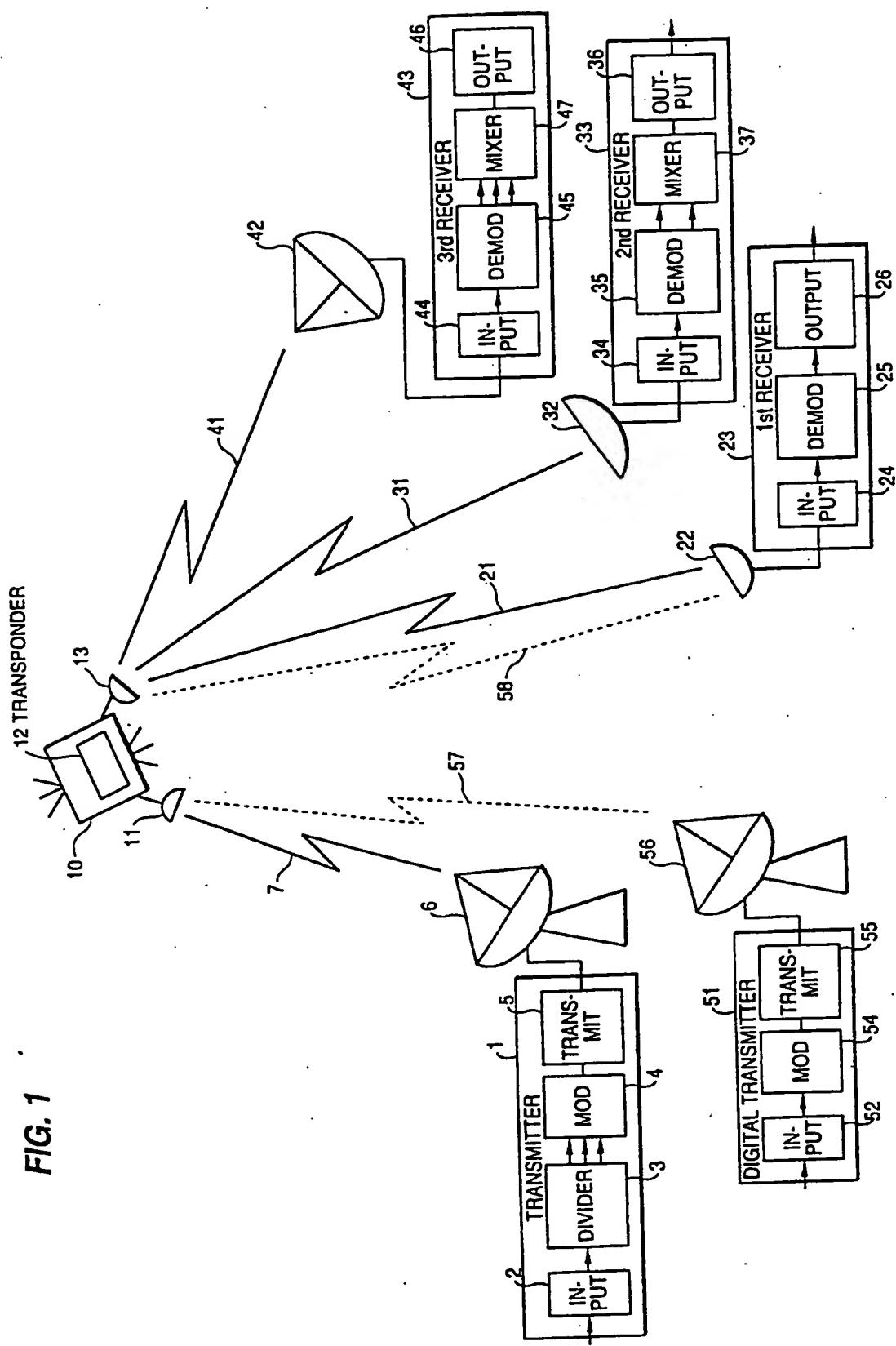


FIG. 2 (Amended)

f1

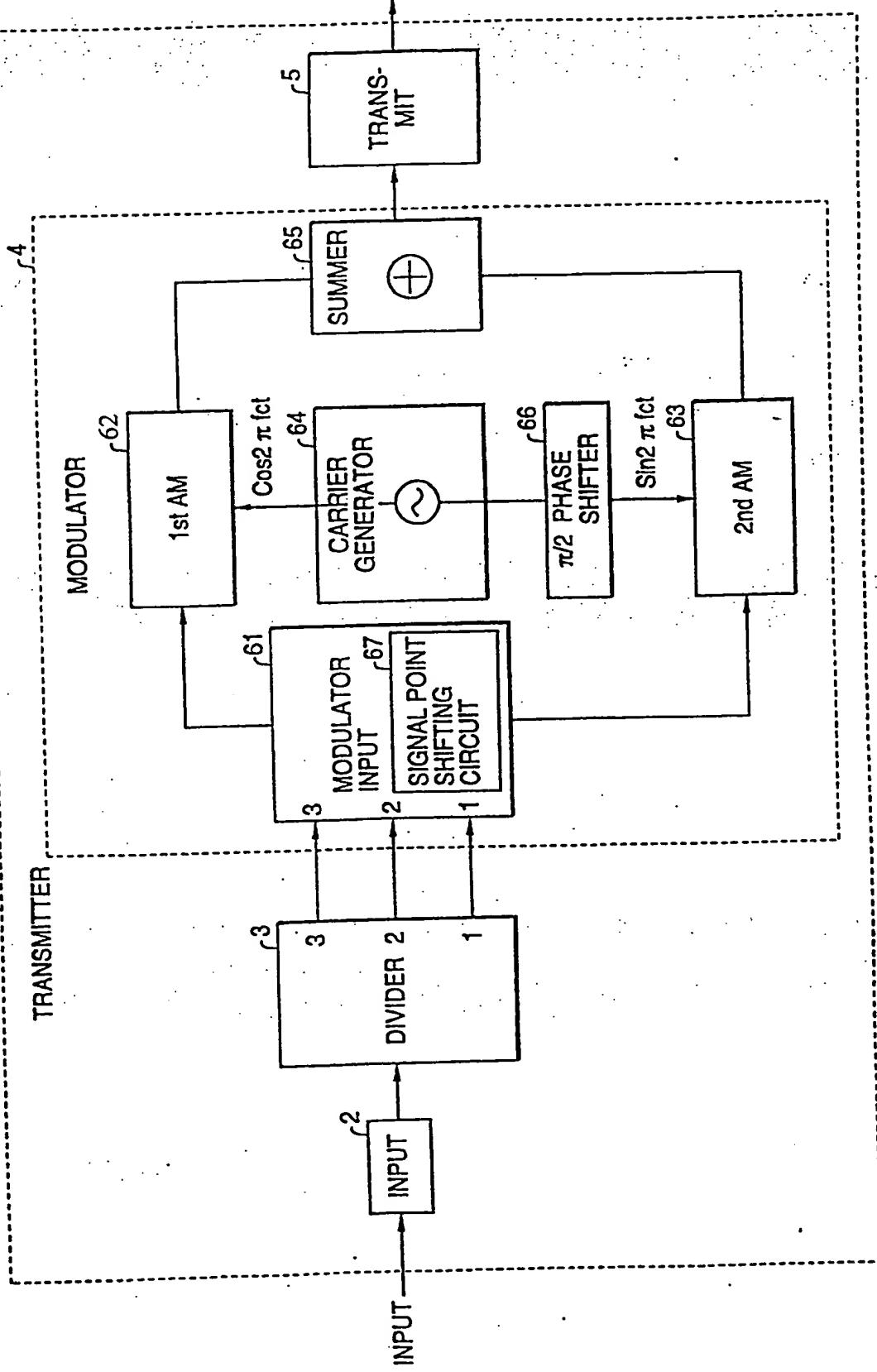


FIG. 3

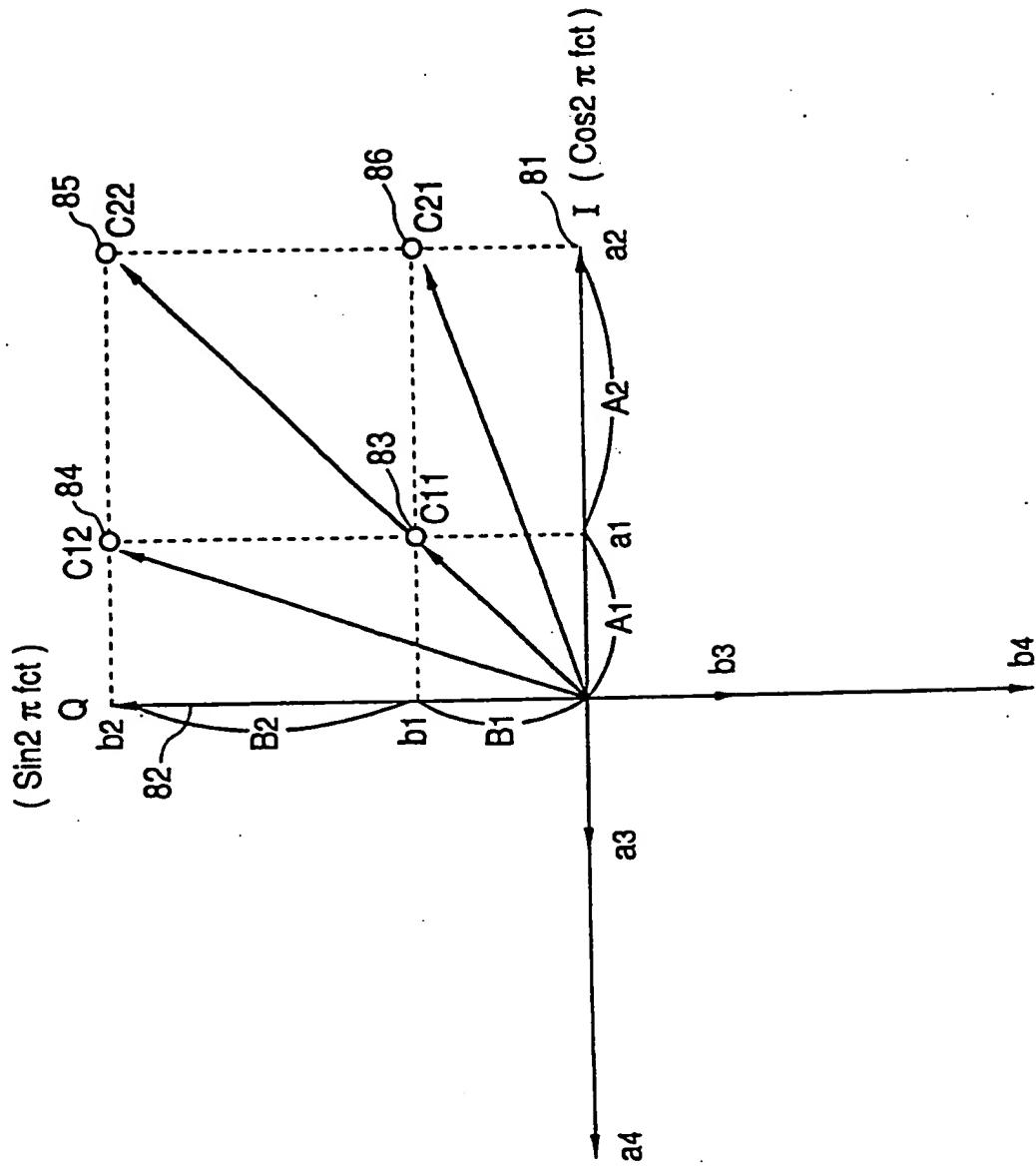


FIG. 4

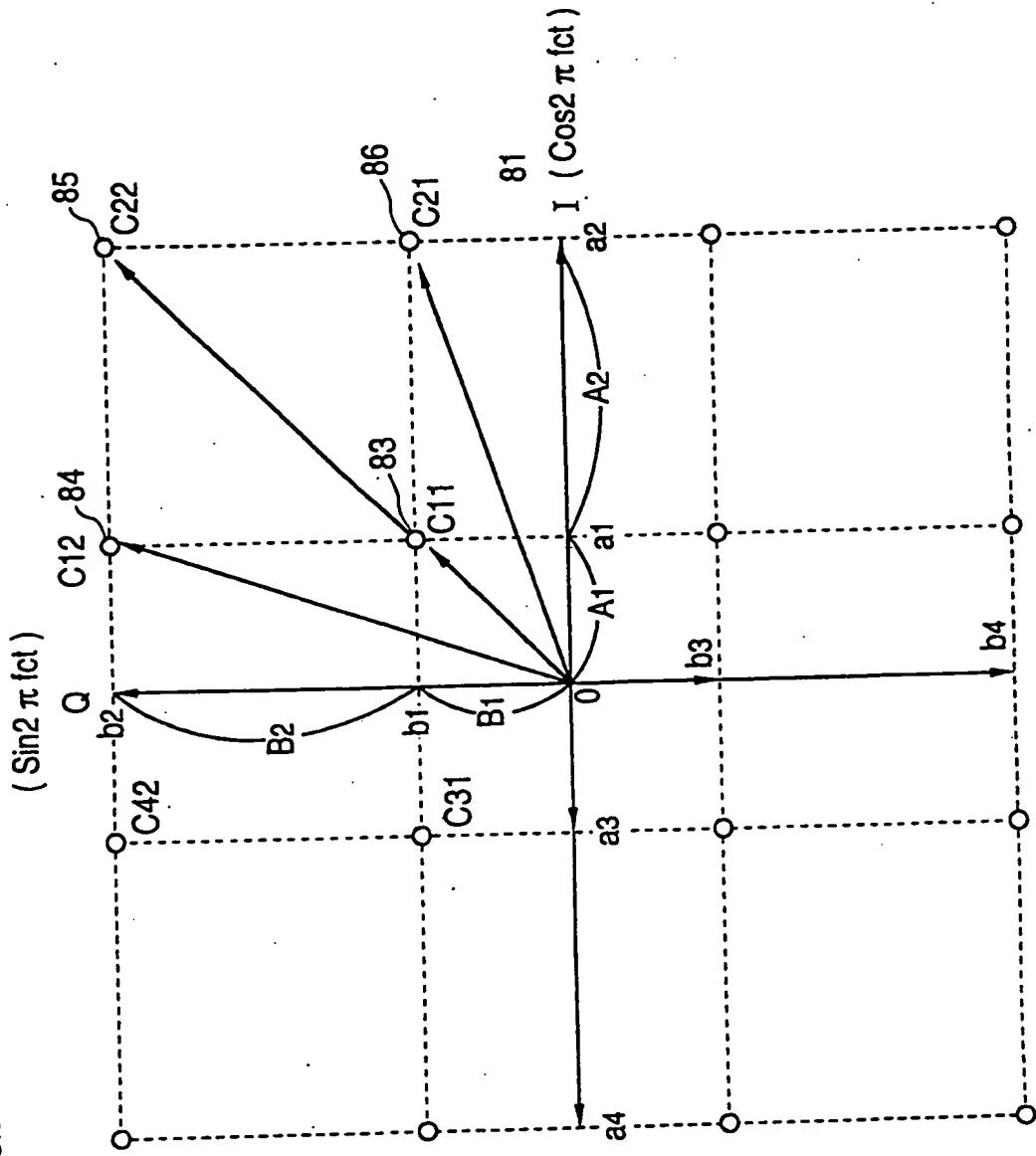


FIG. 5

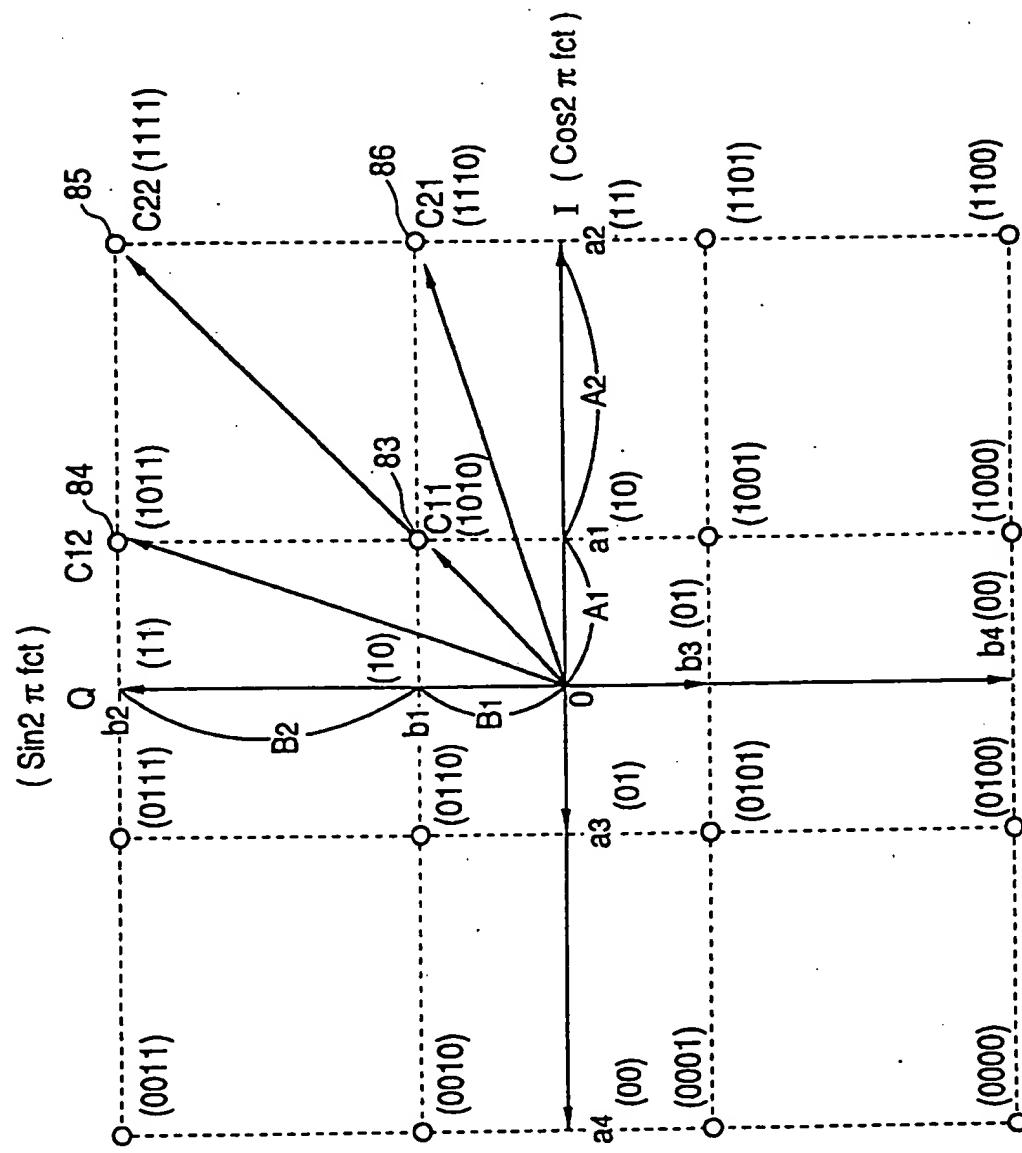


FIG. 6

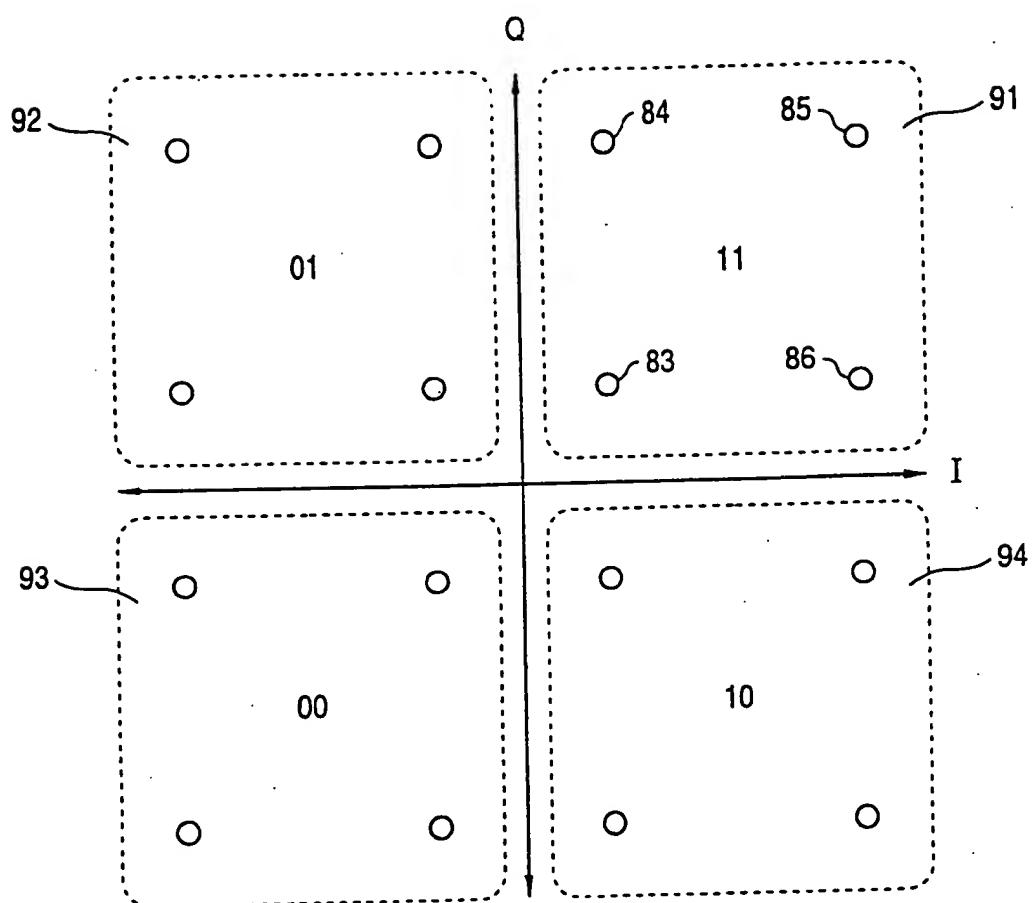


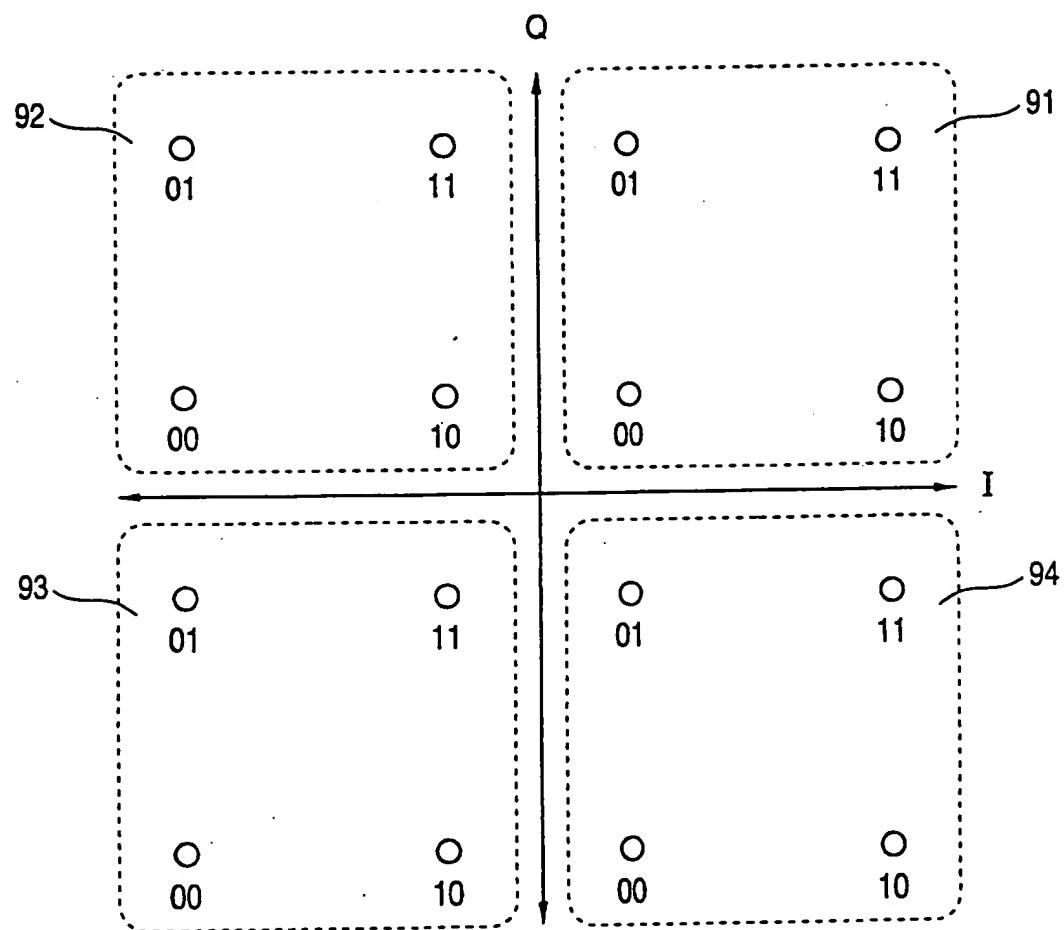
FIG. 7

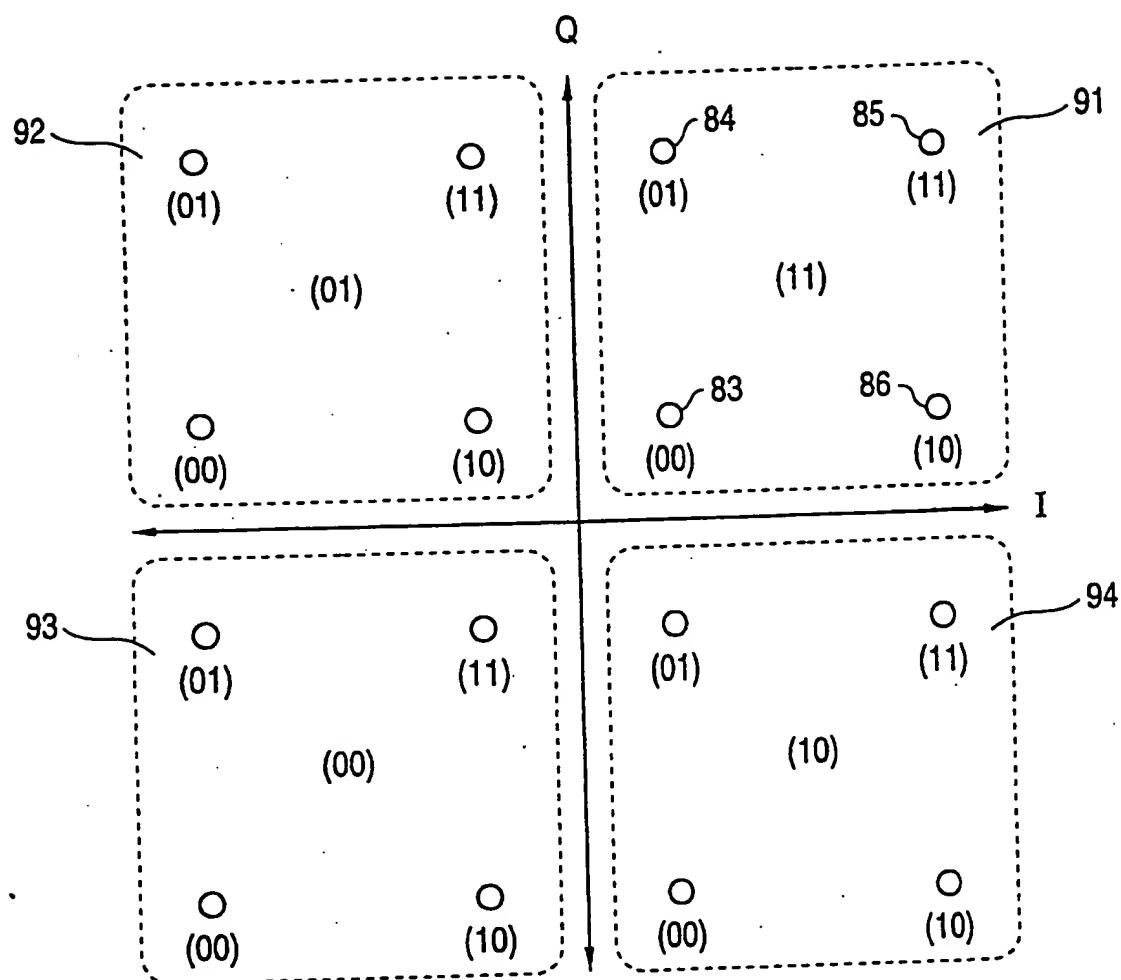
FIG. 8

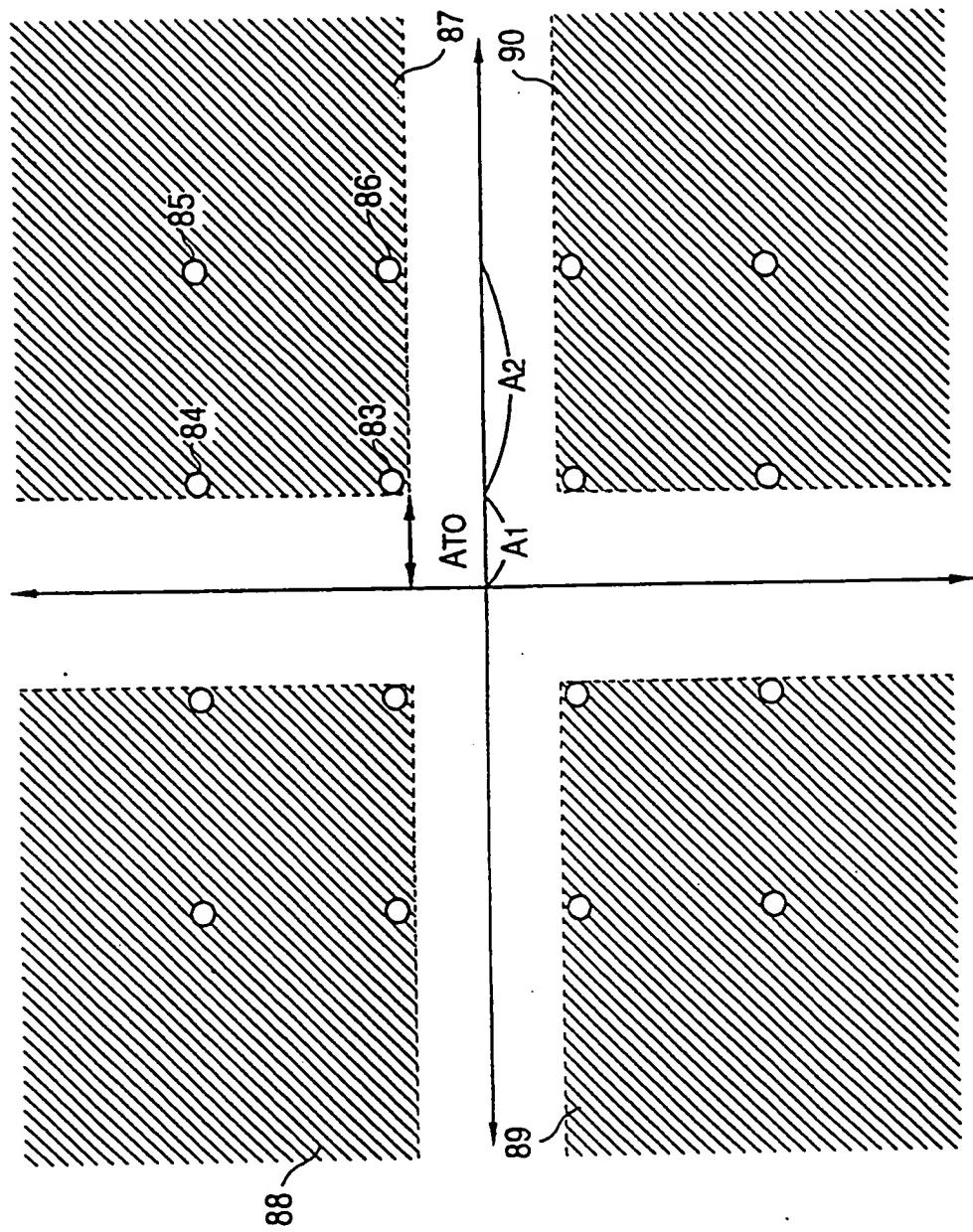
FIG. 9

FIG. 10 (Amended)

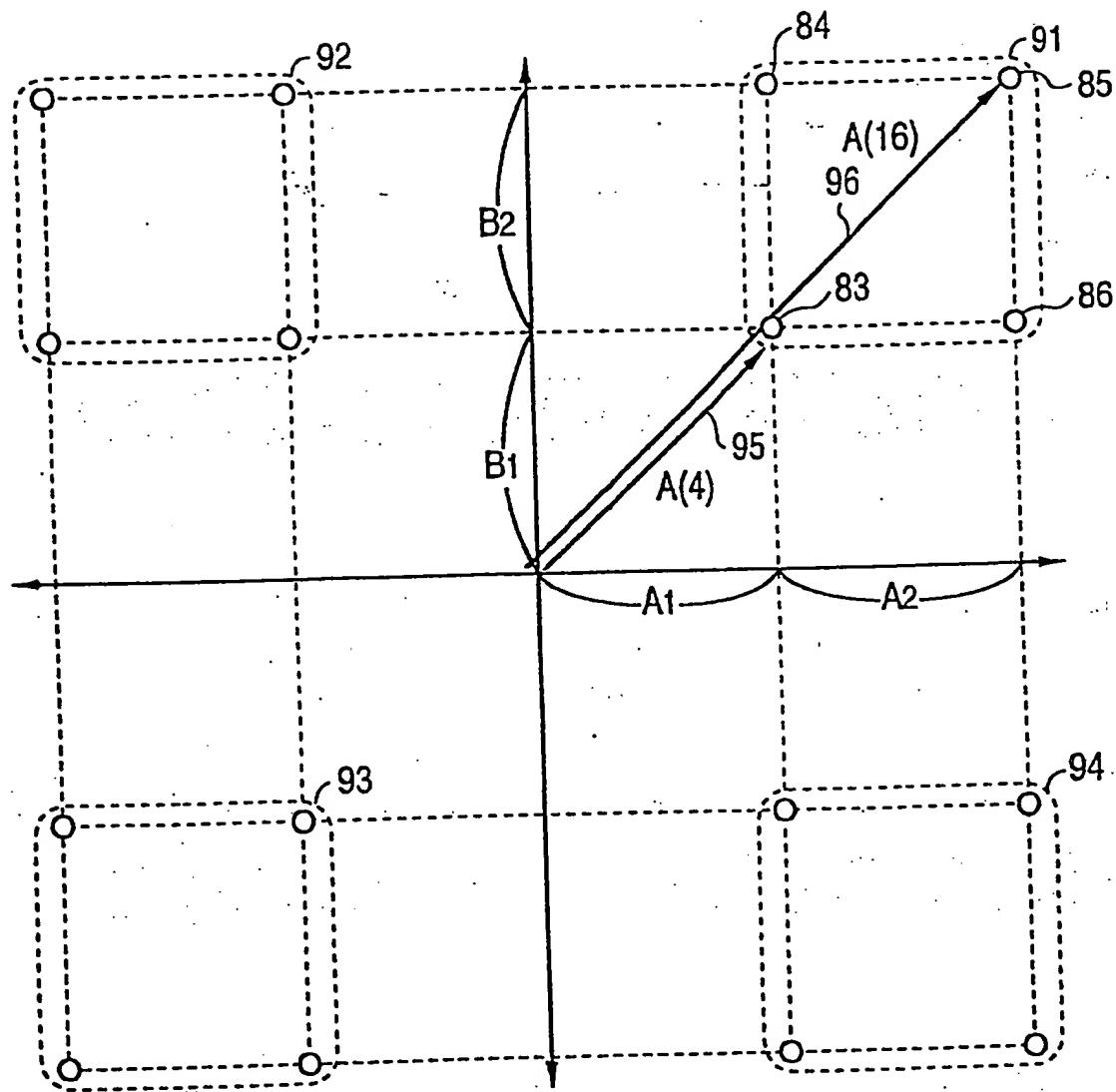


FIG. 11

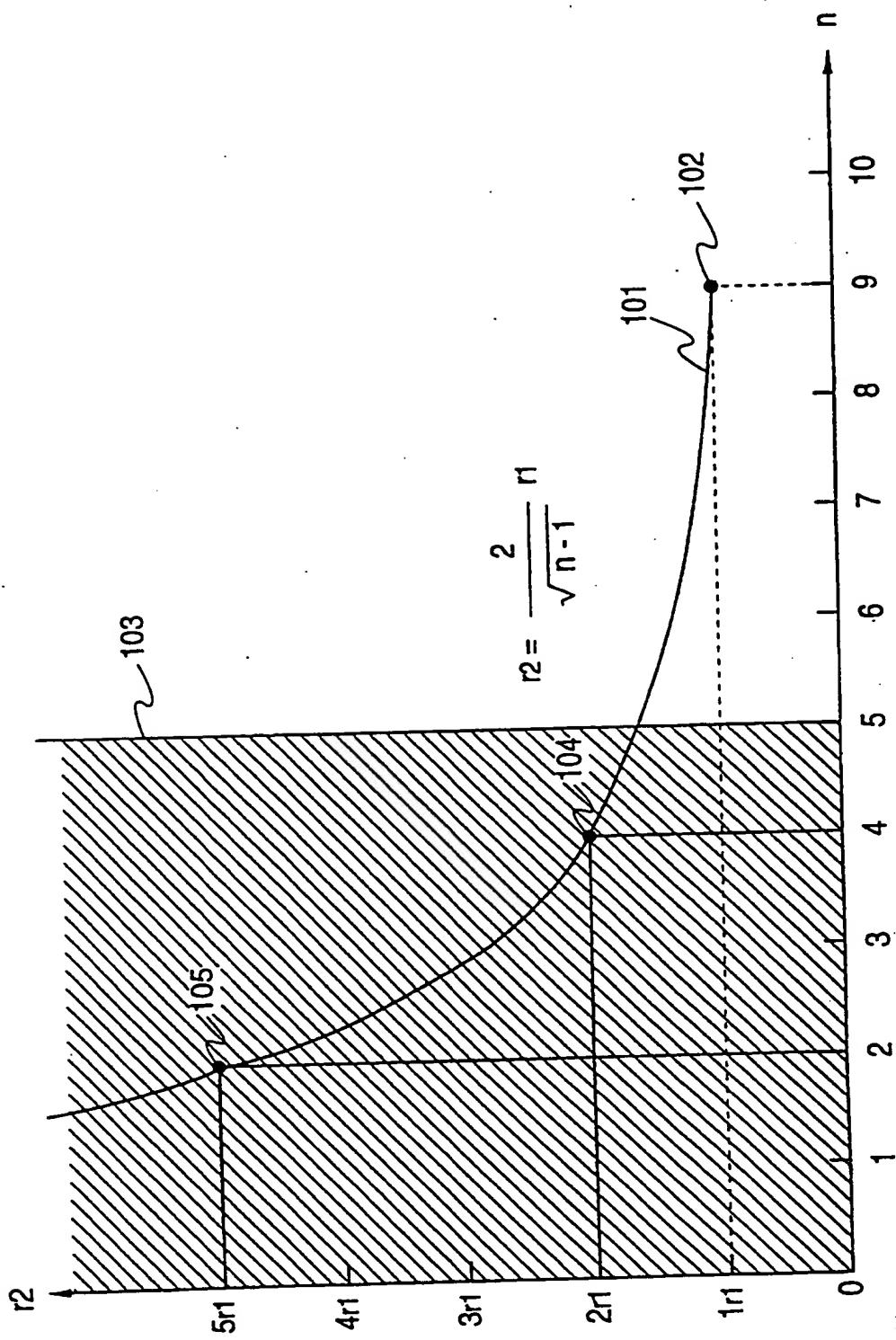
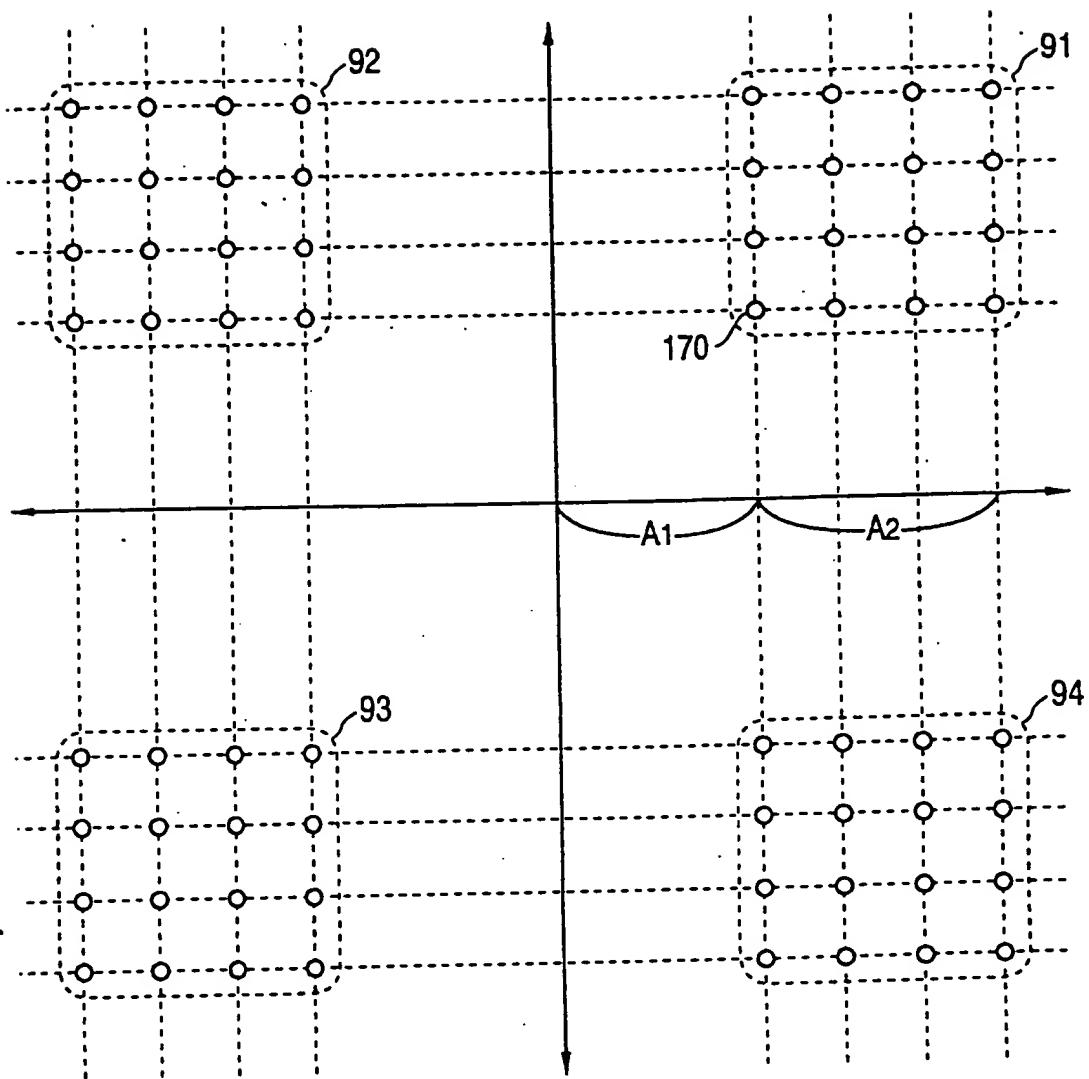


FIG. 12



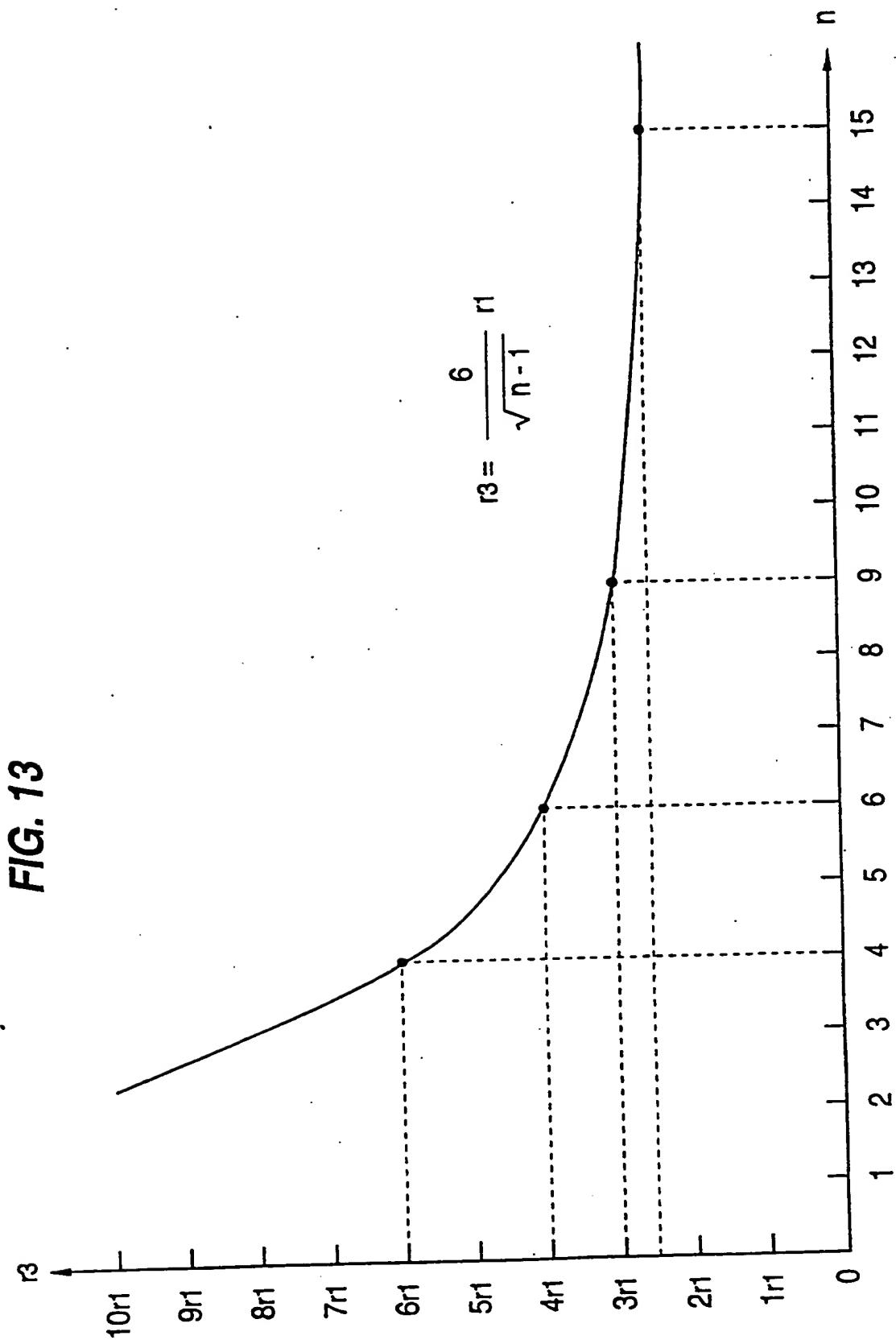


FIG. 14

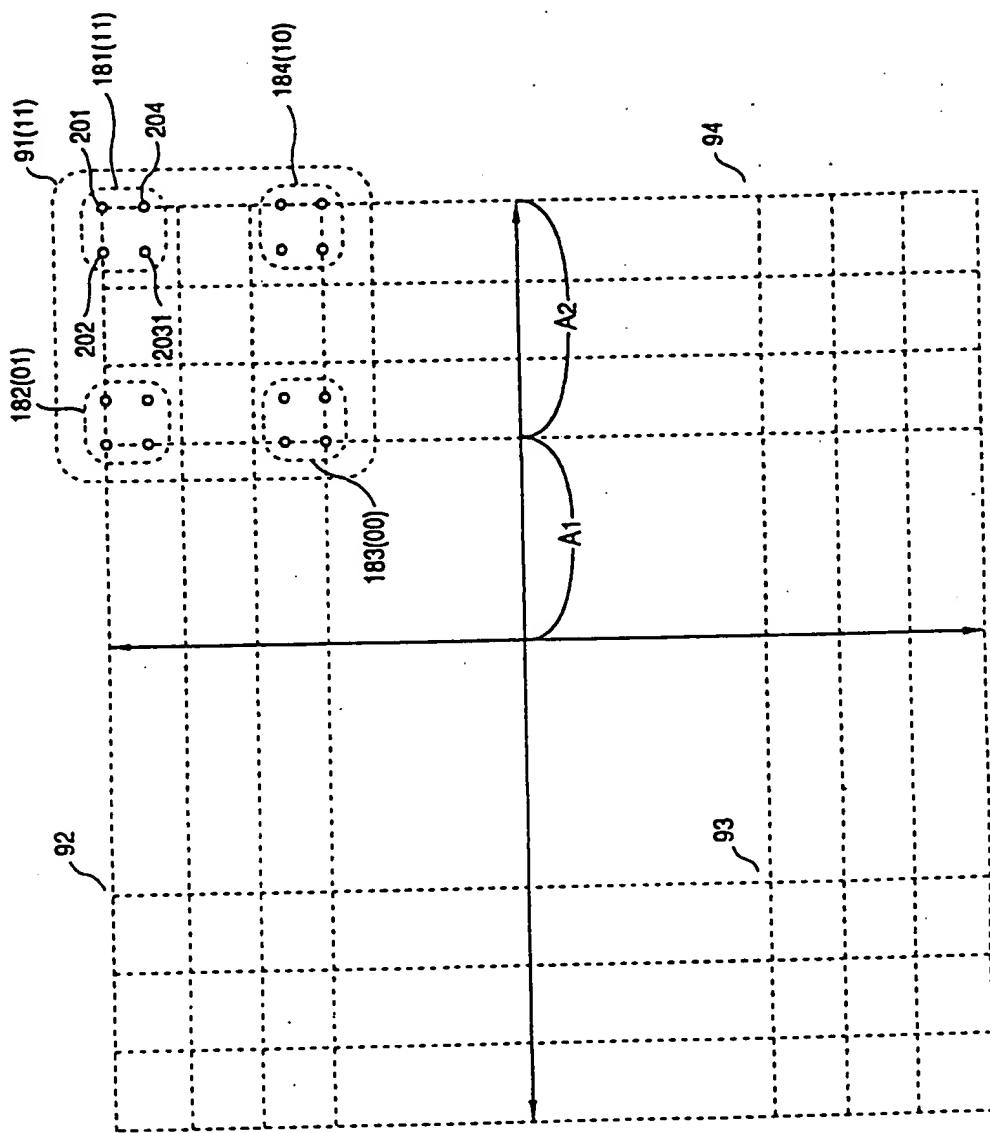


FIG. 15

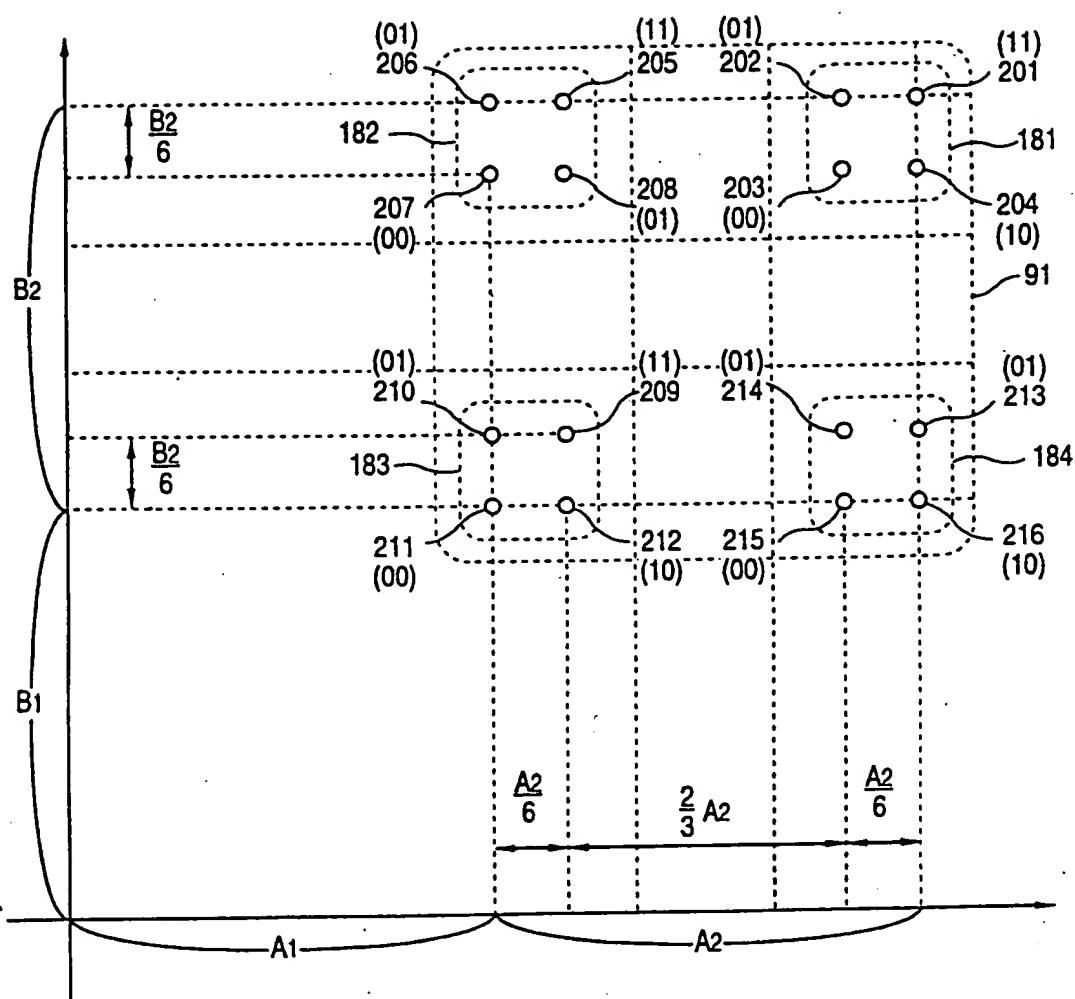


FIG. 16

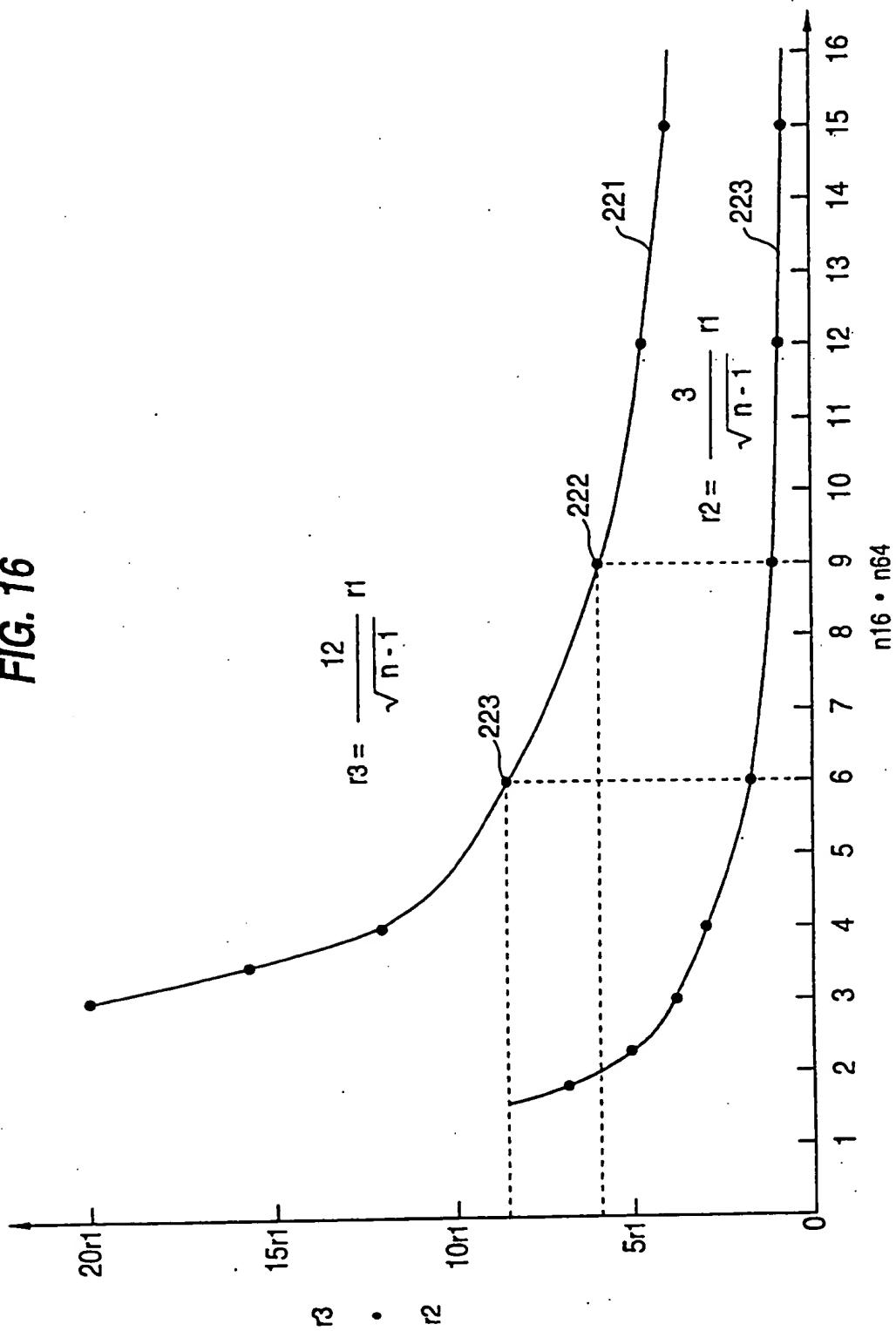


FIG. 17 (Amended)

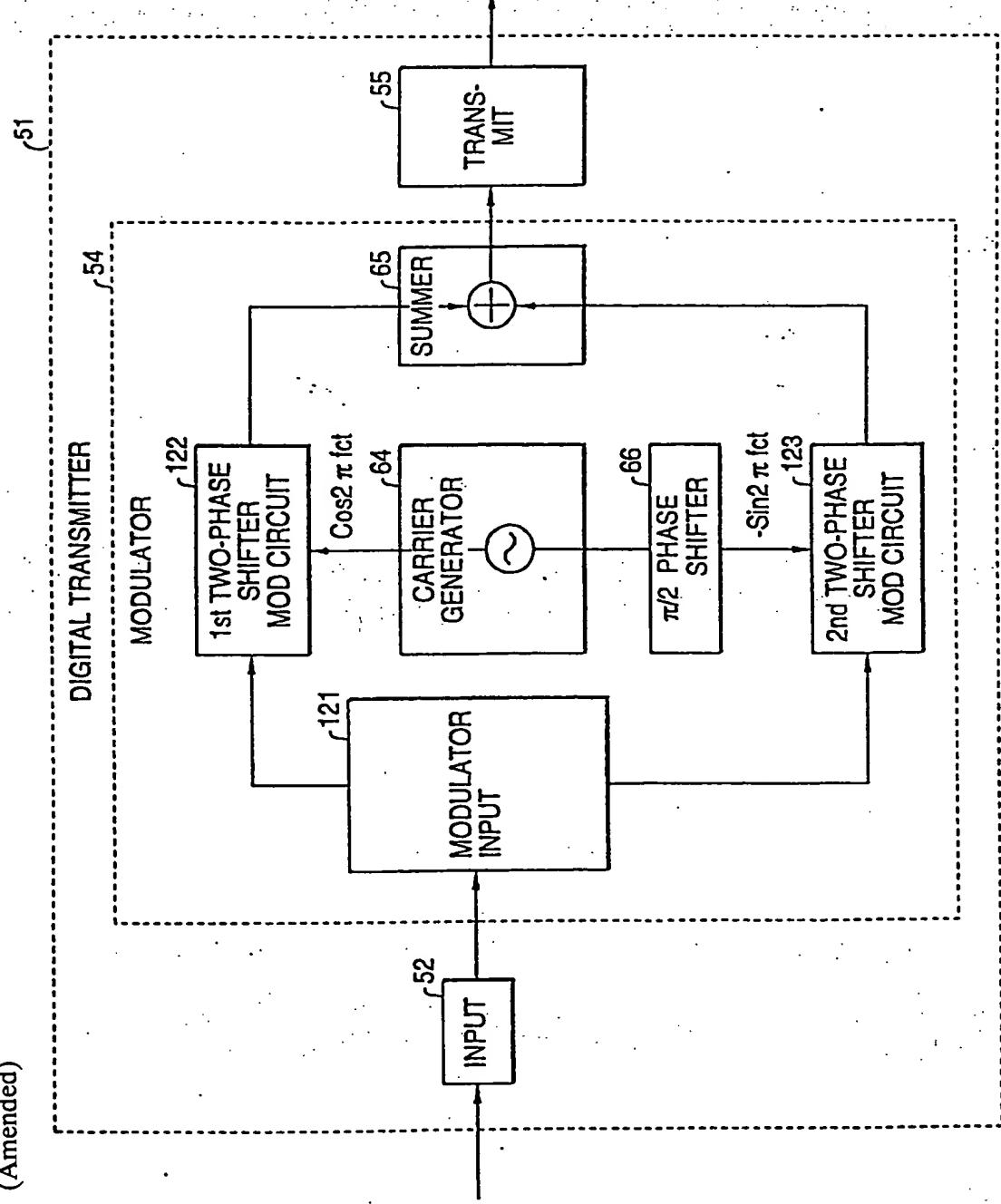


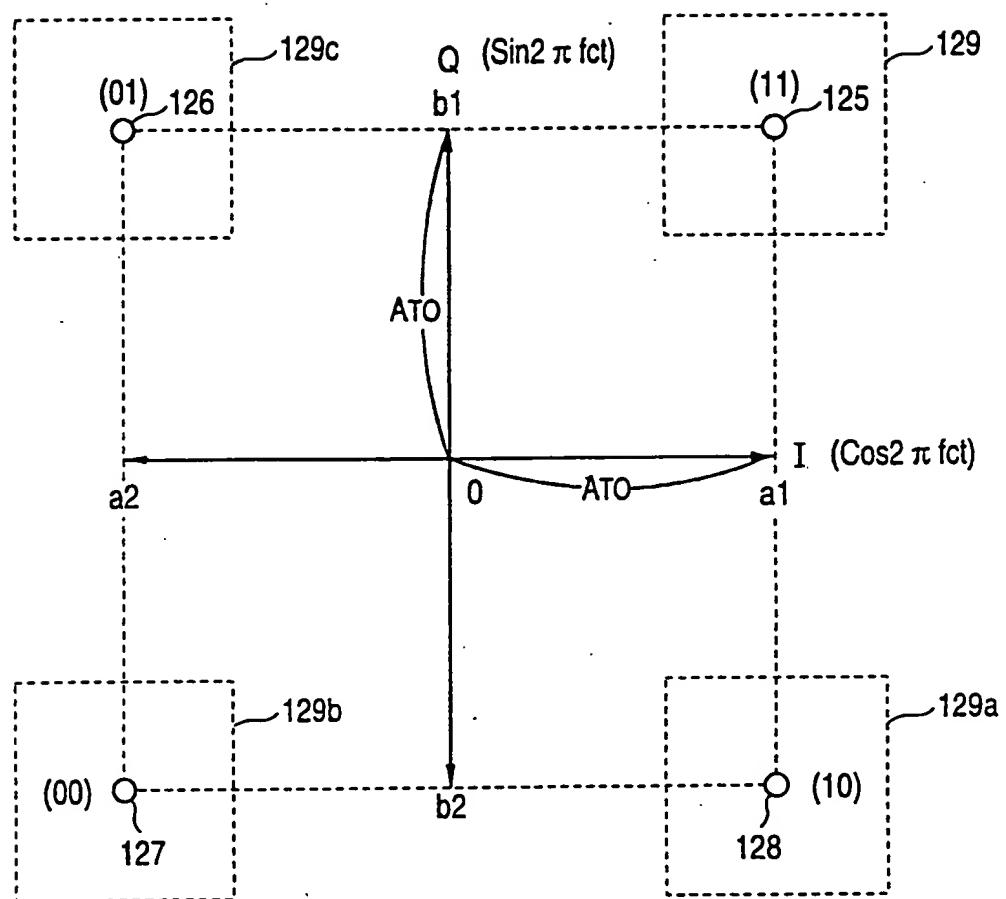
FIG. 18

FIG. 19

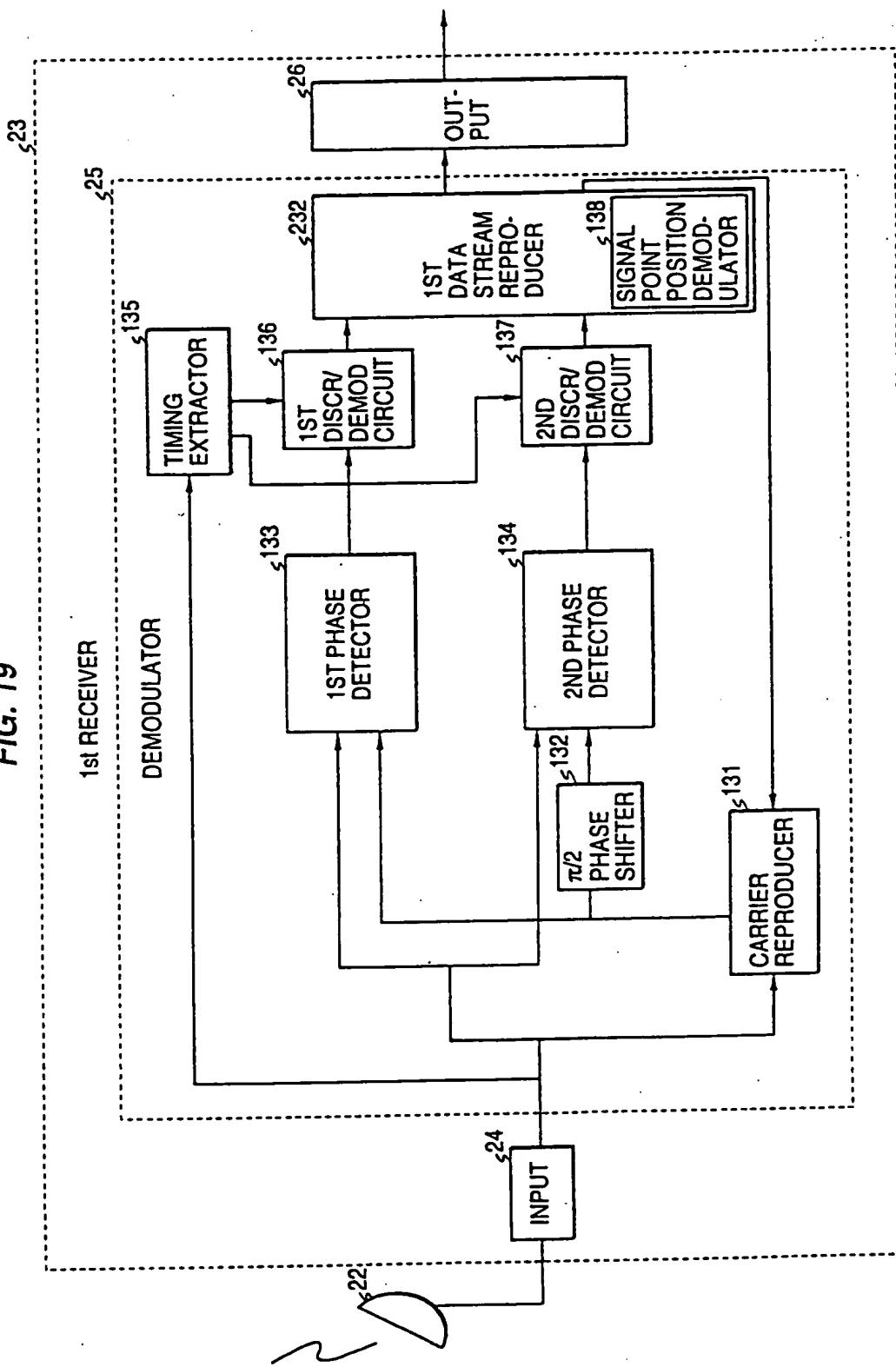


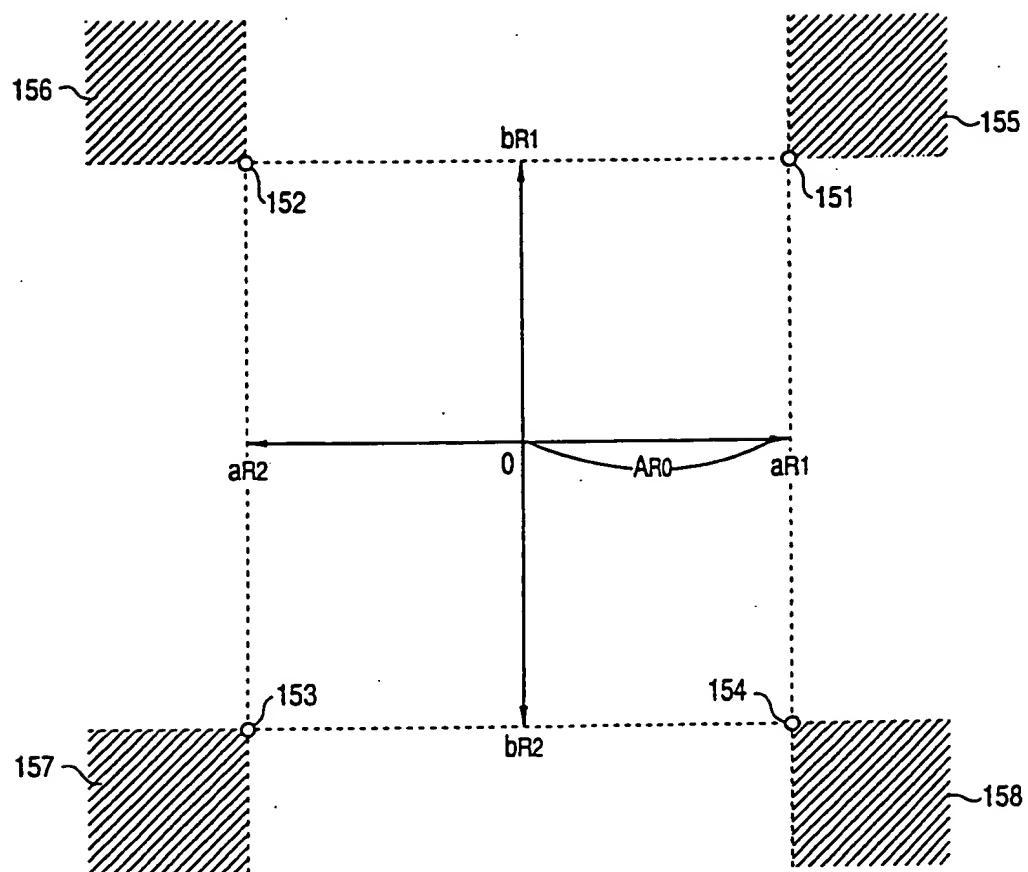
FIG. 20

FIG. 21

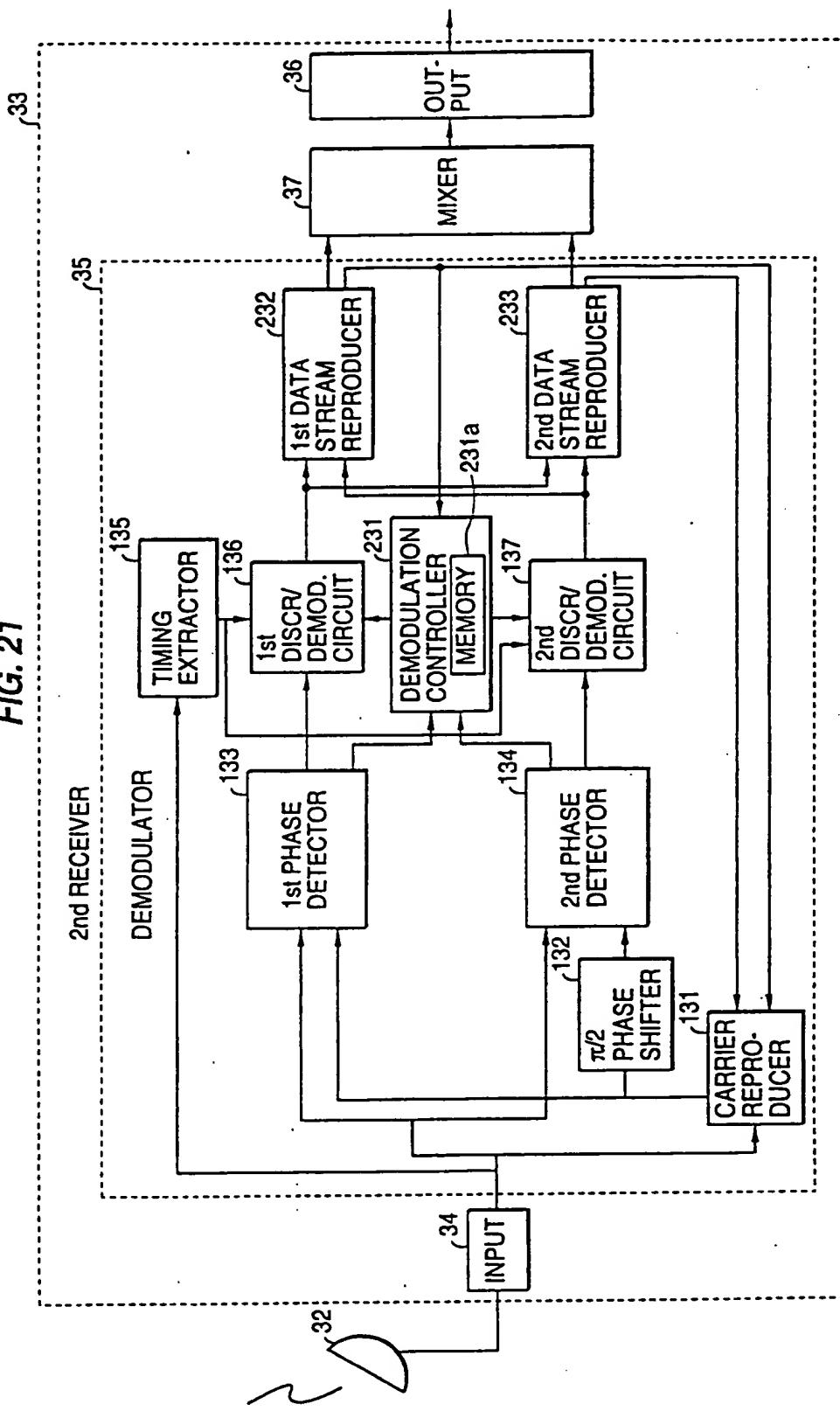
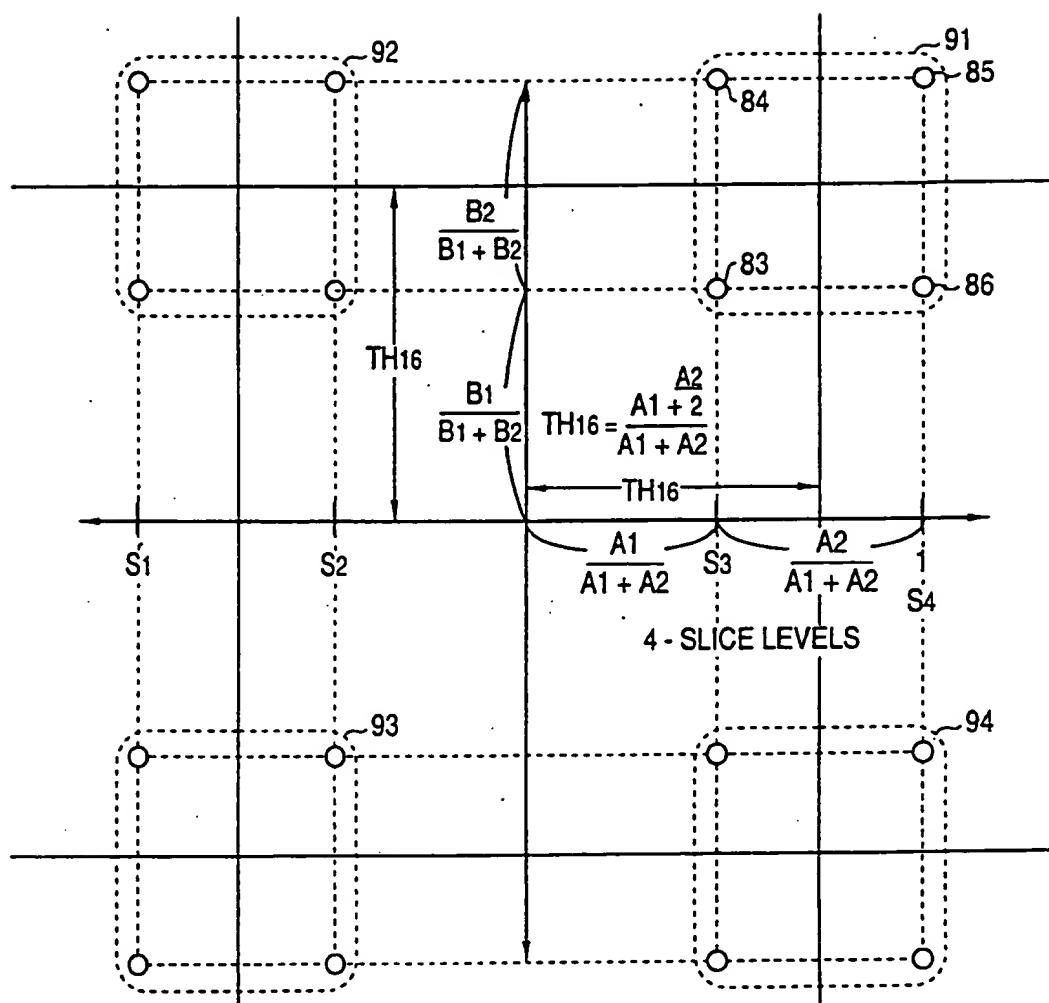


FIG. 22



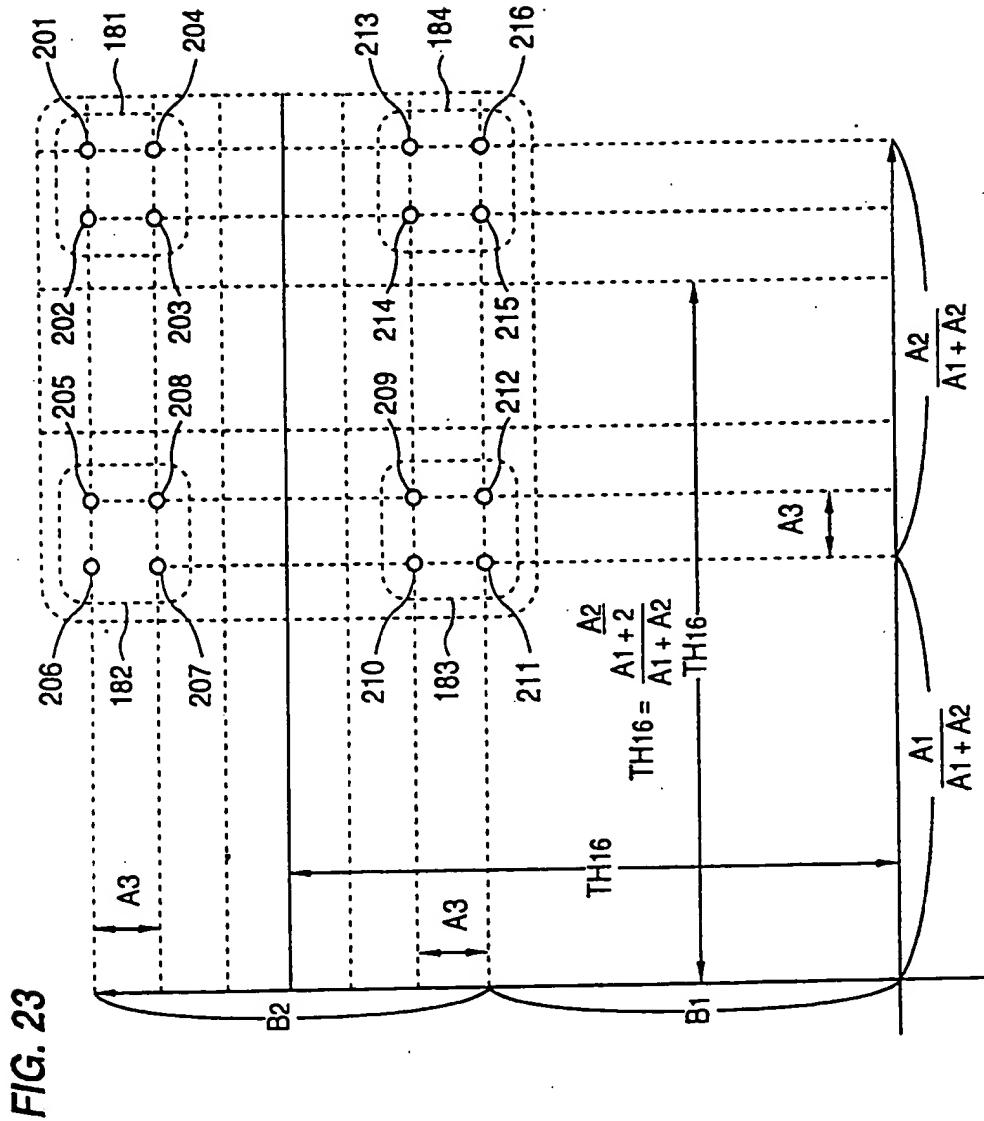


FIG. 24

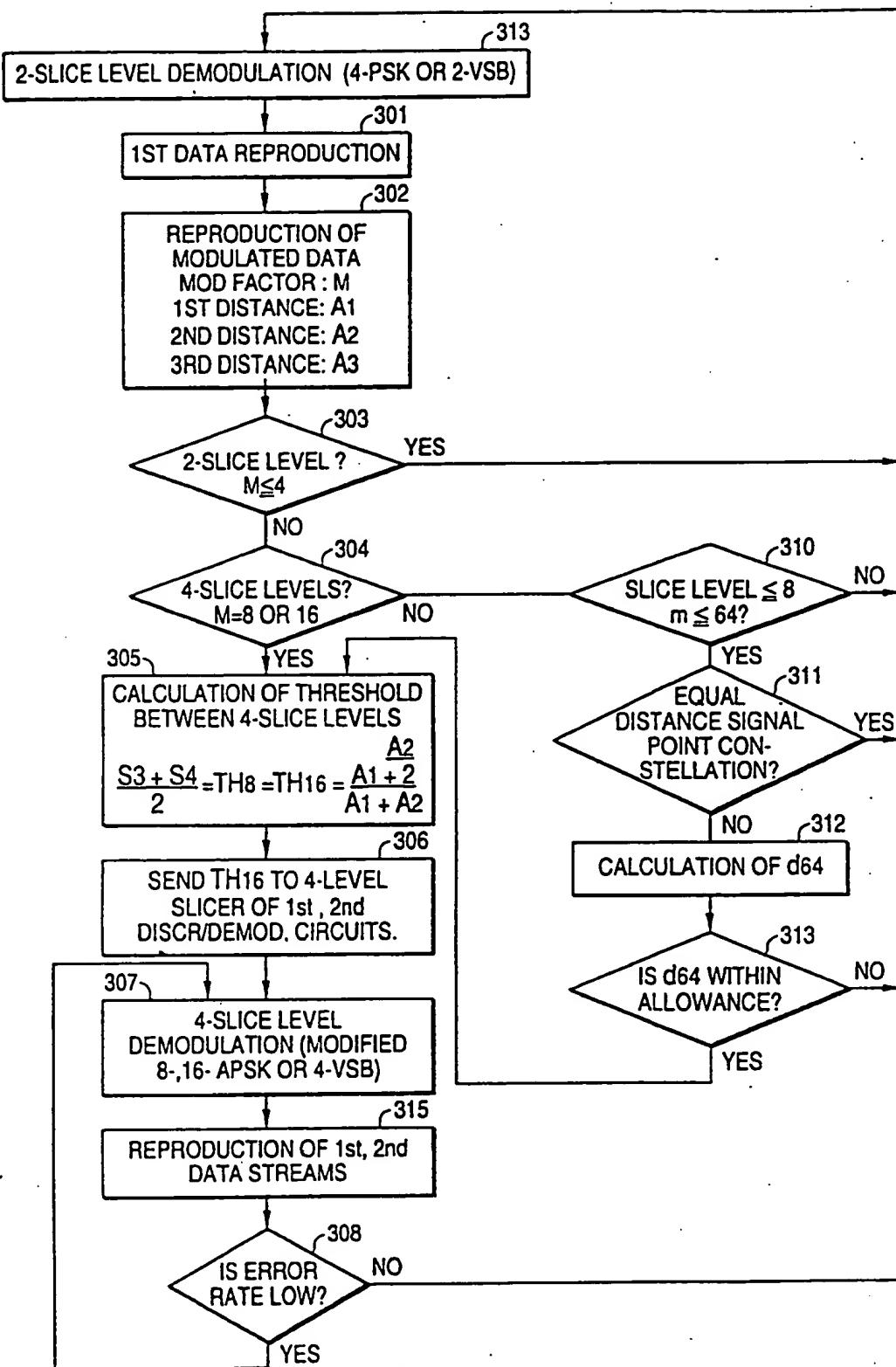


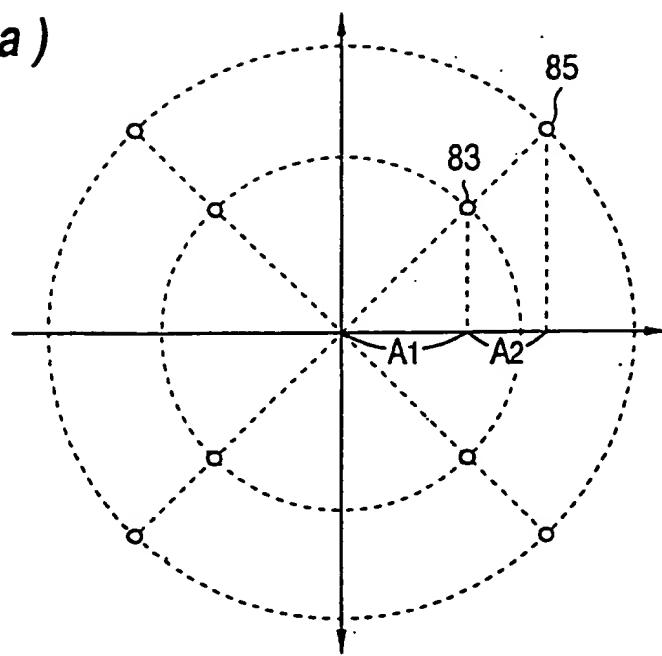
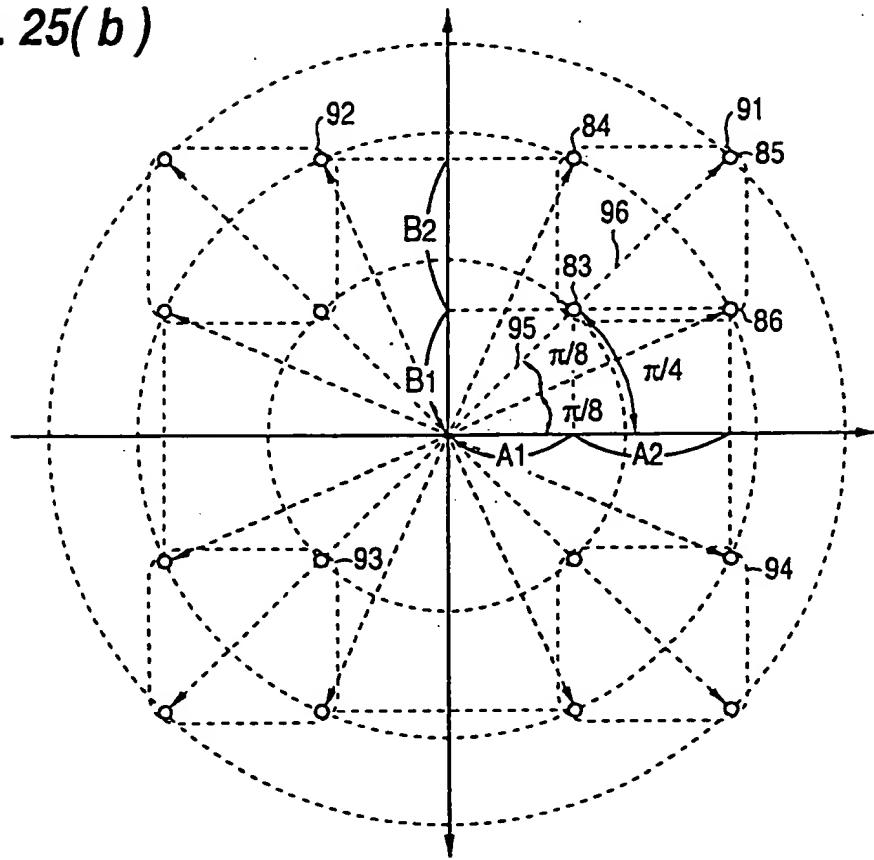
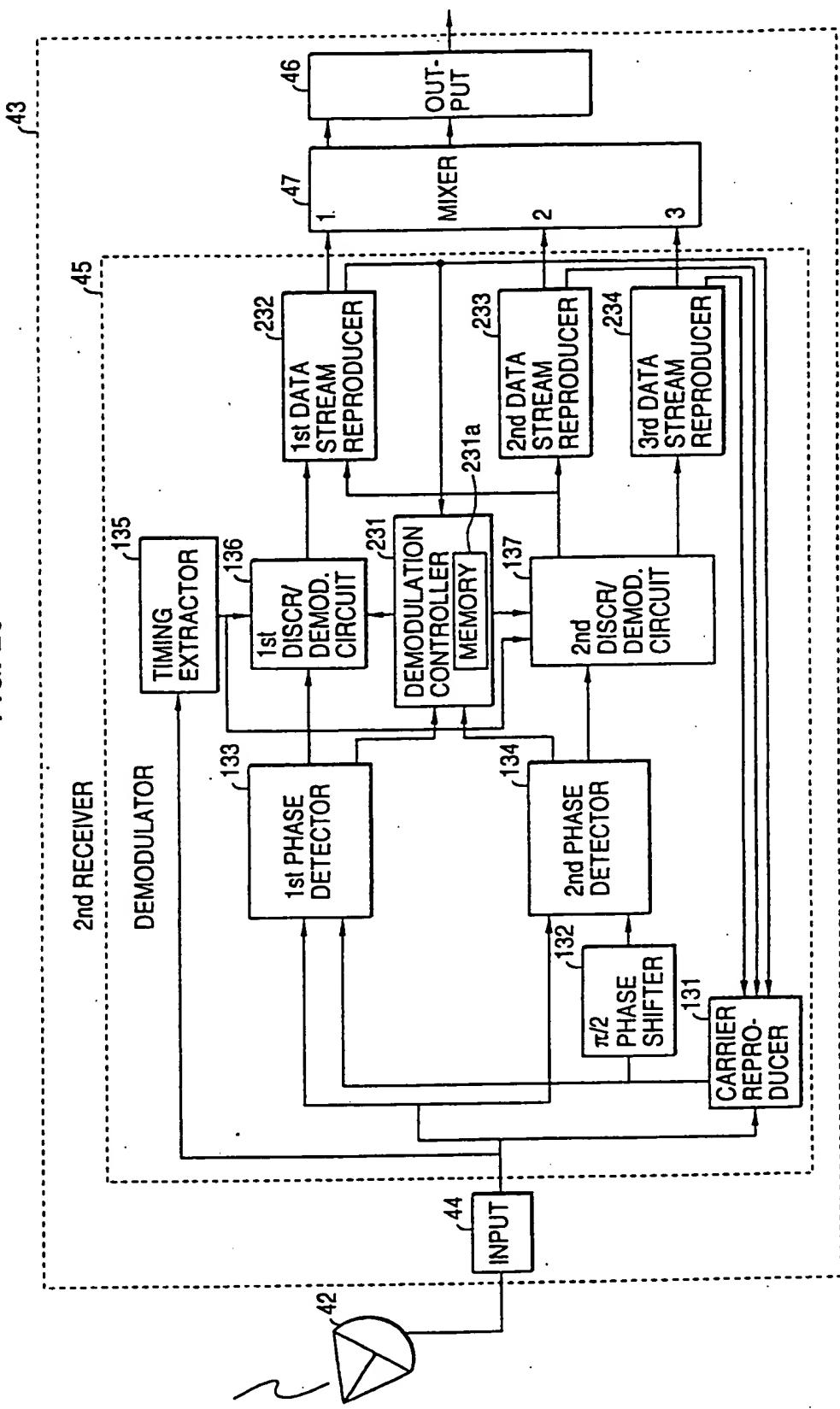
FIG. 25(a)**FIG. 25(b)**

FIG. 26



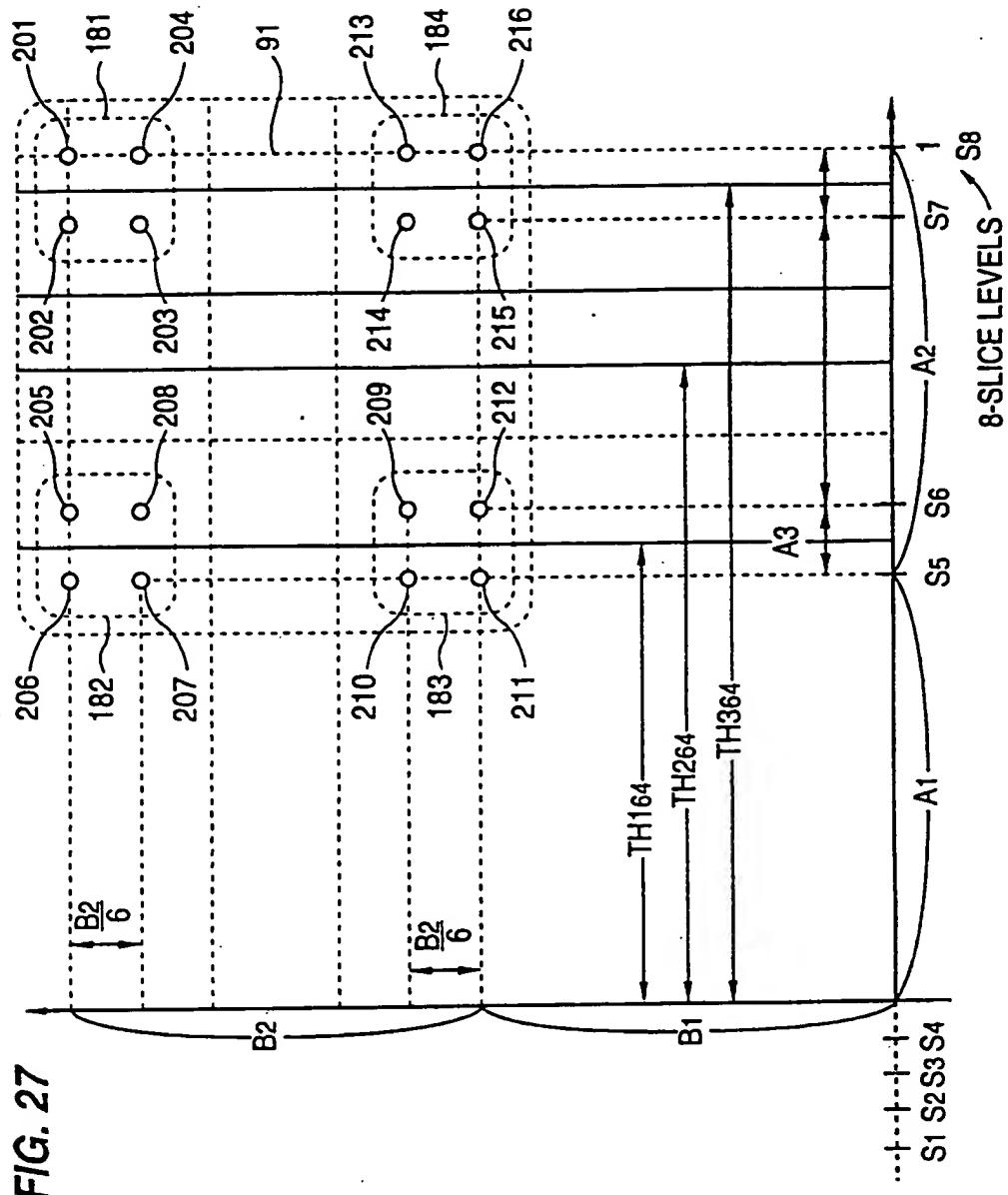


FIG. 28

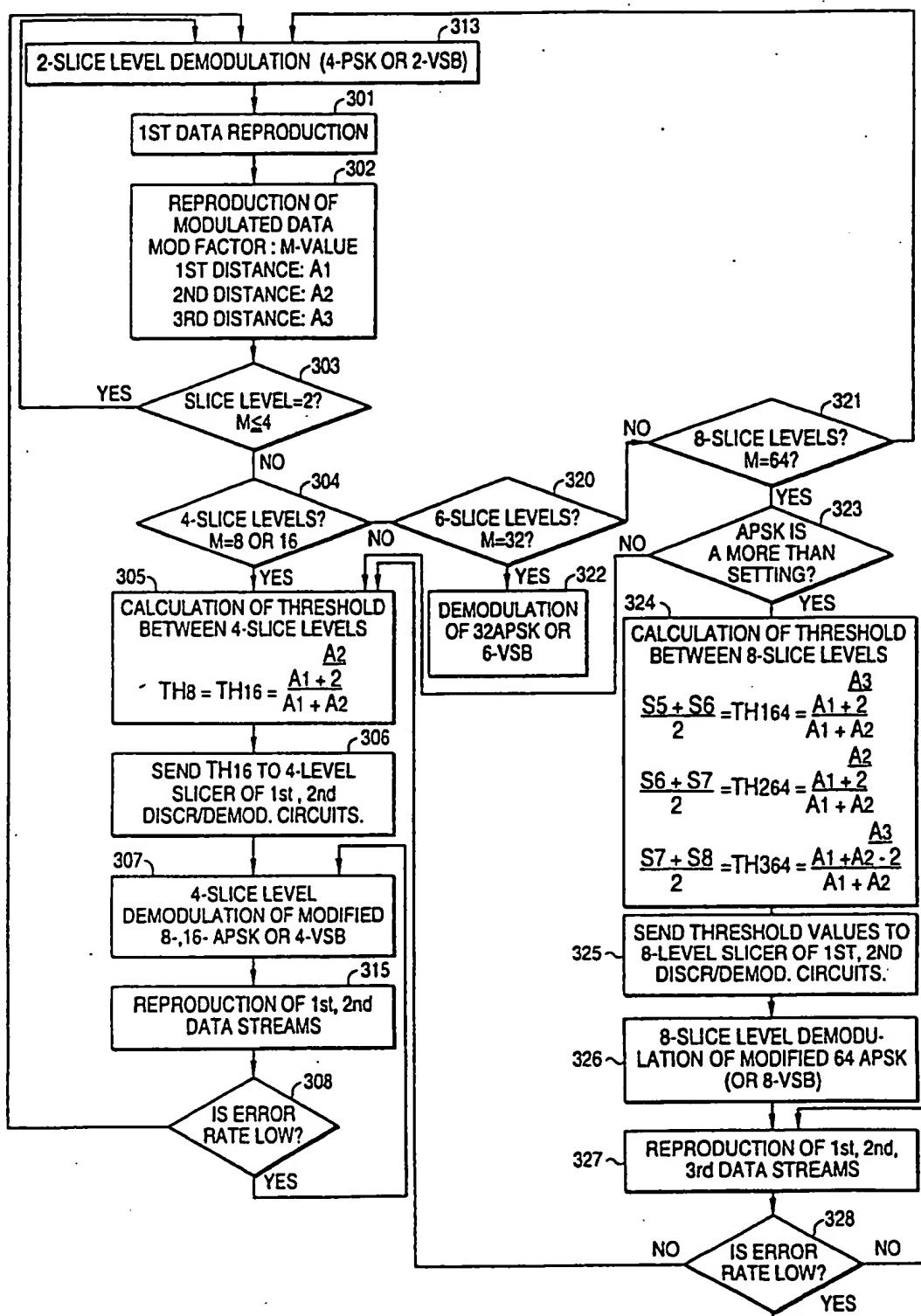


FIG. 29 (Amended)

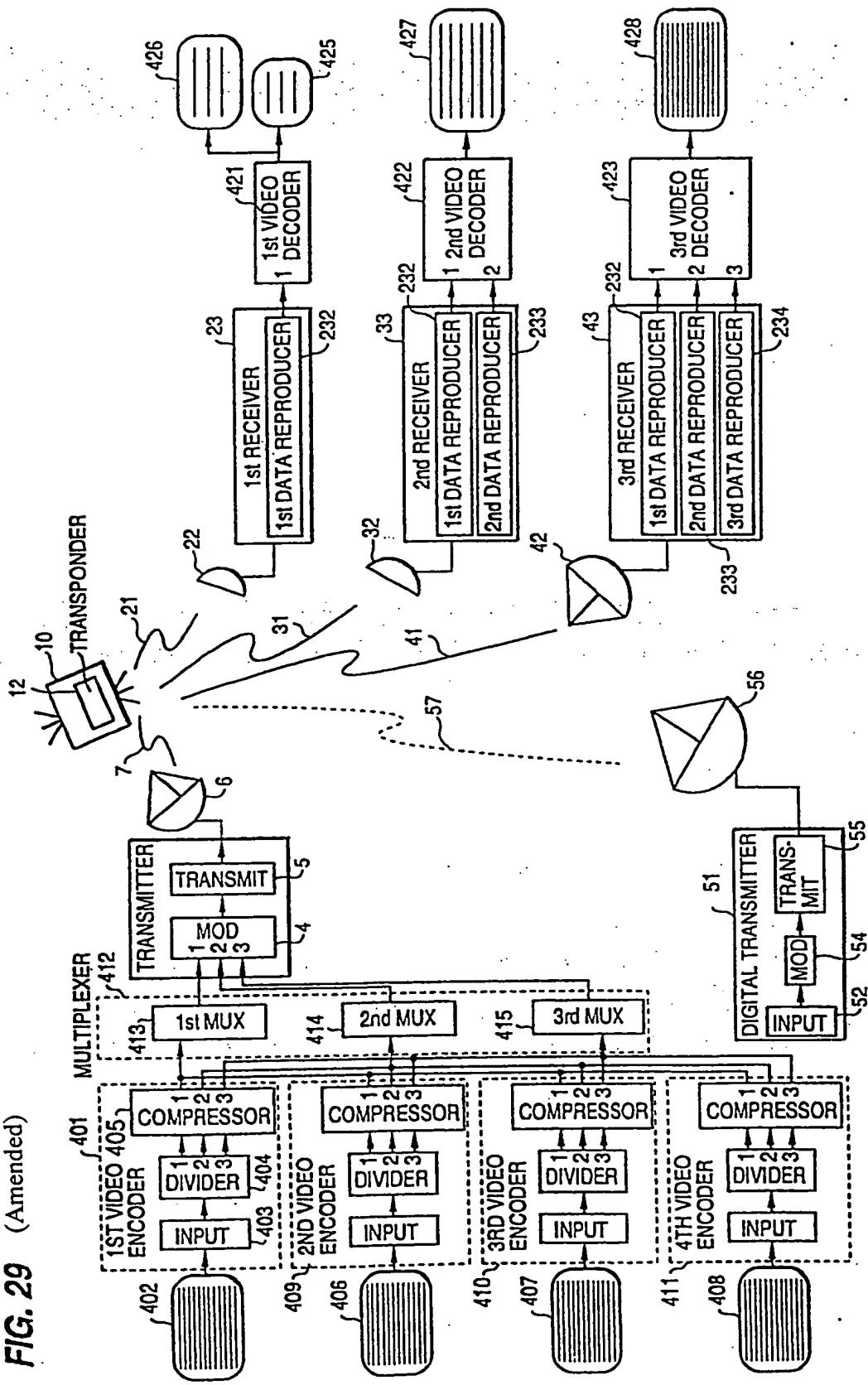
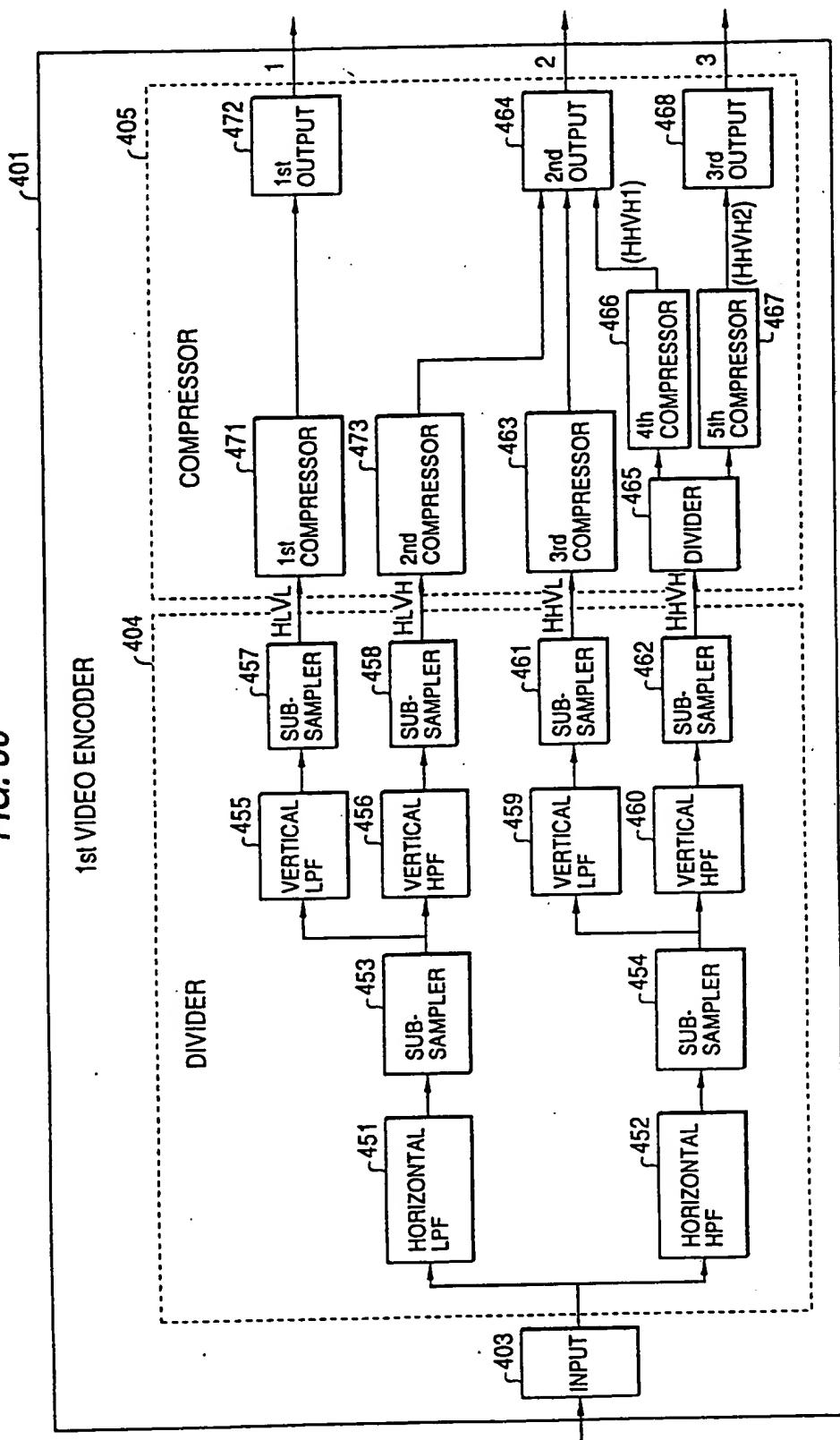


FIG. 30



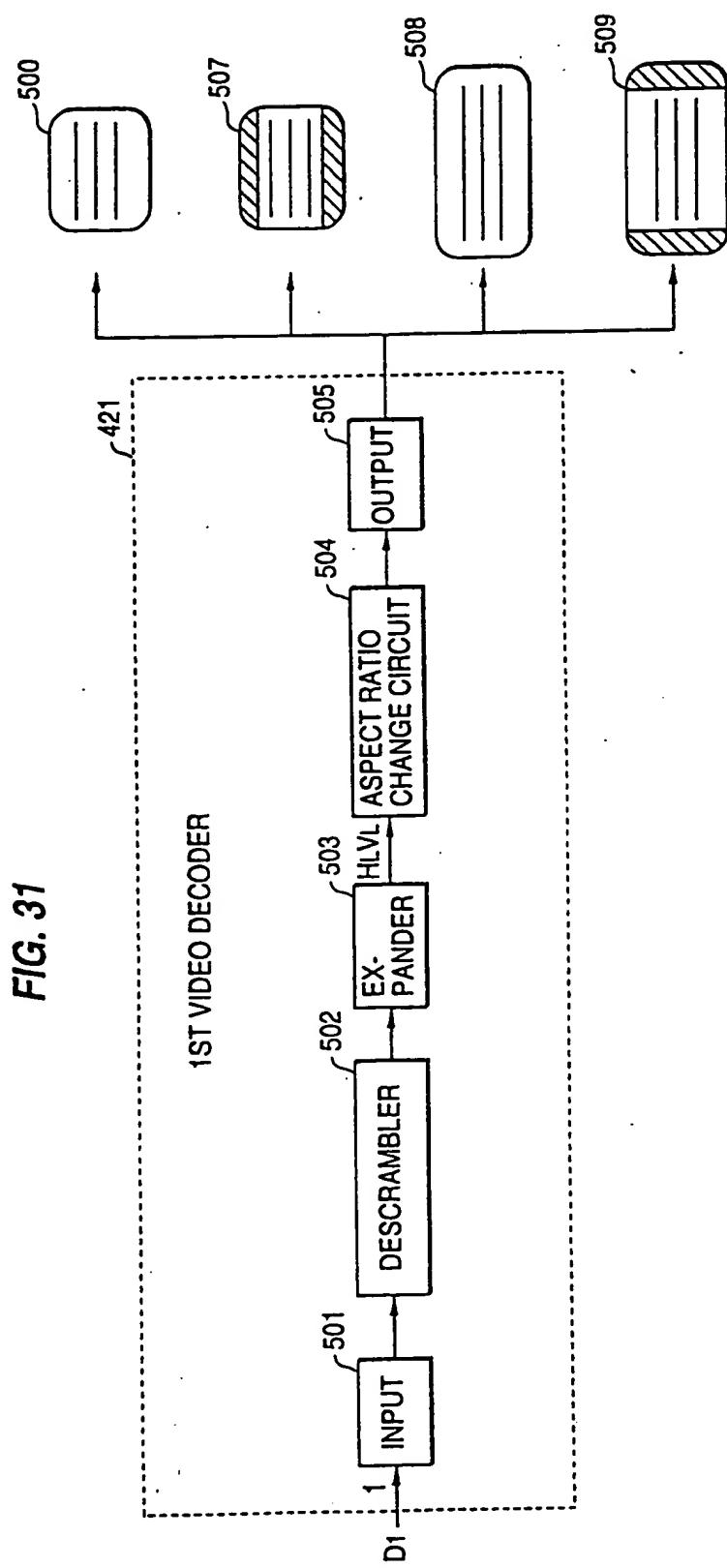


FIG. 32

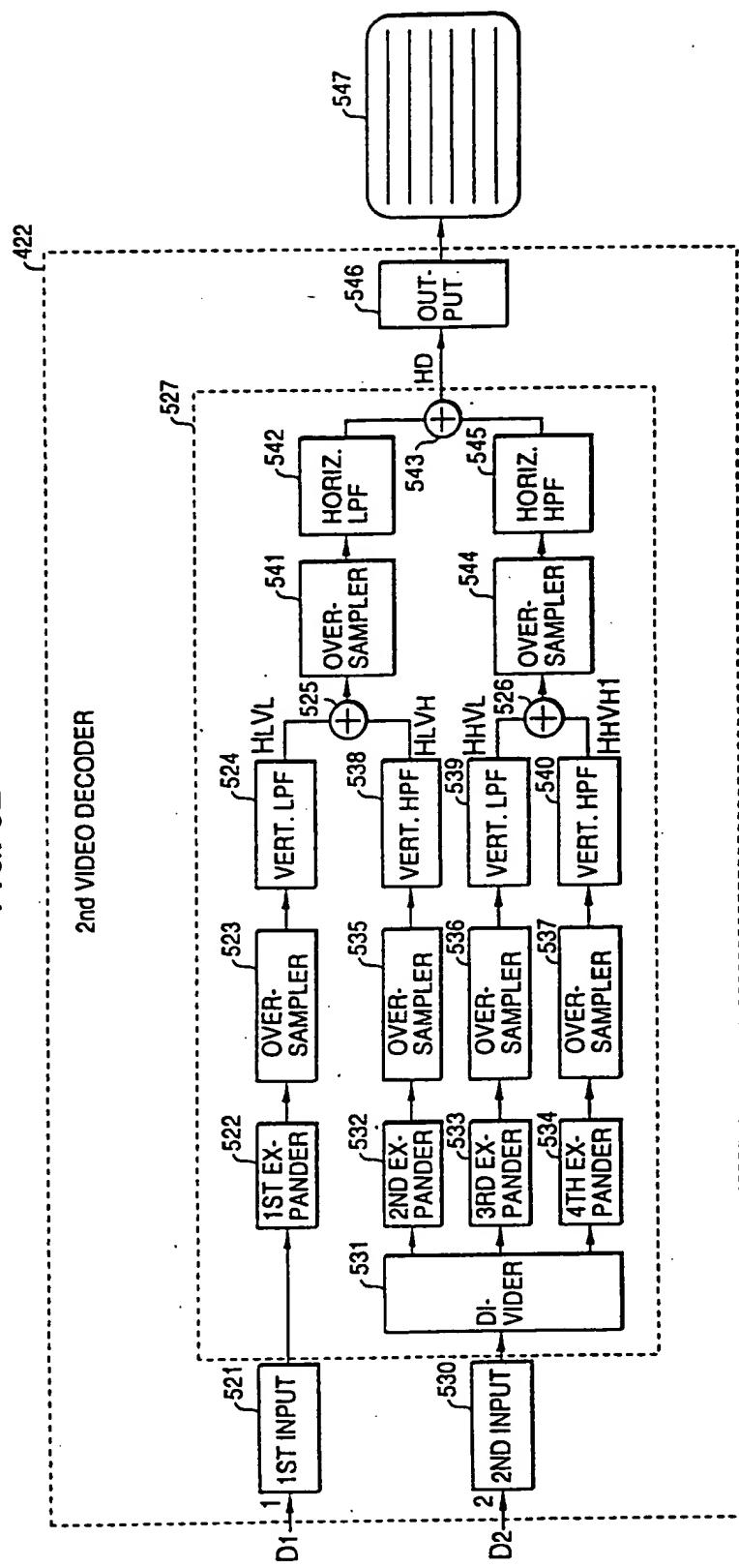


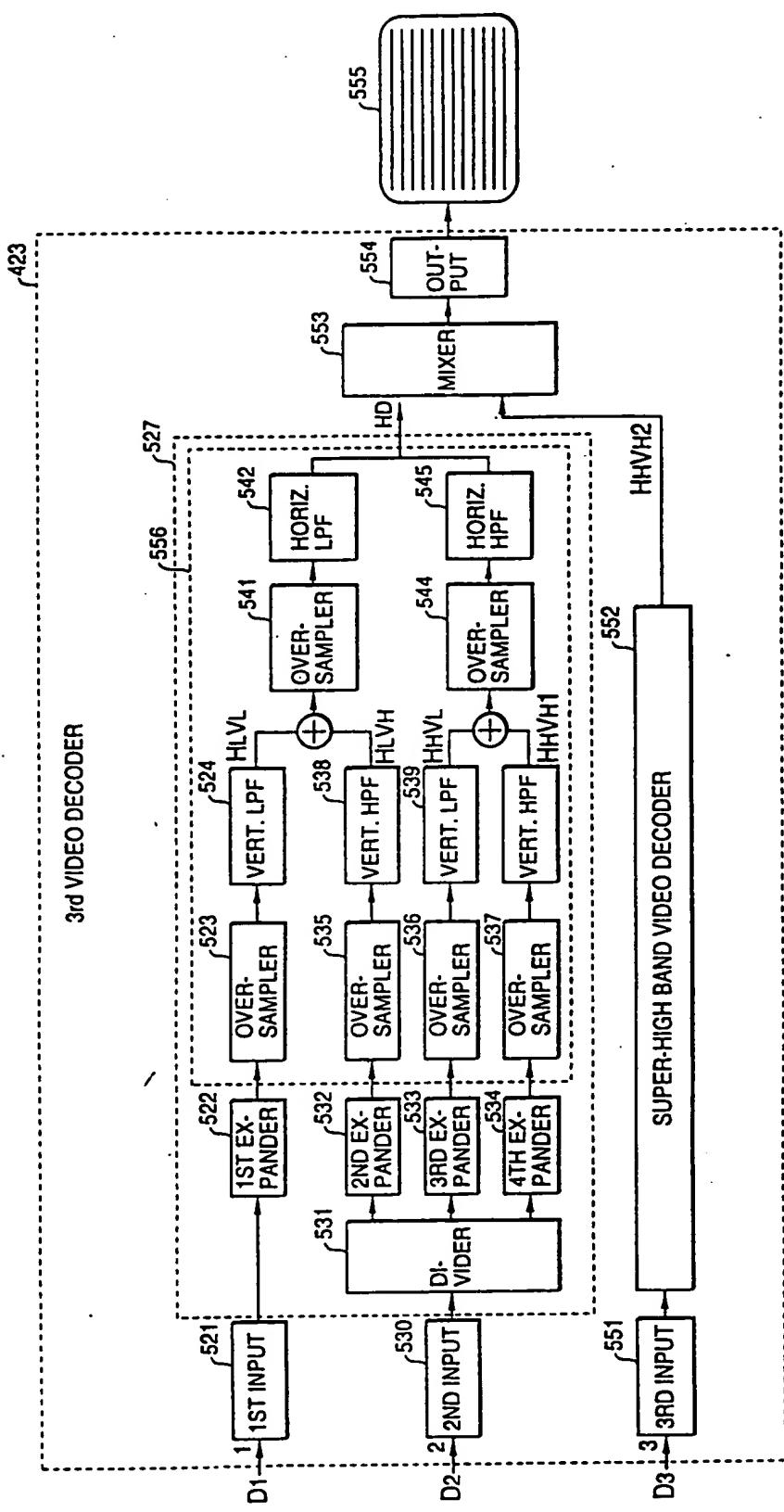
FIG. 33

FIG. 34

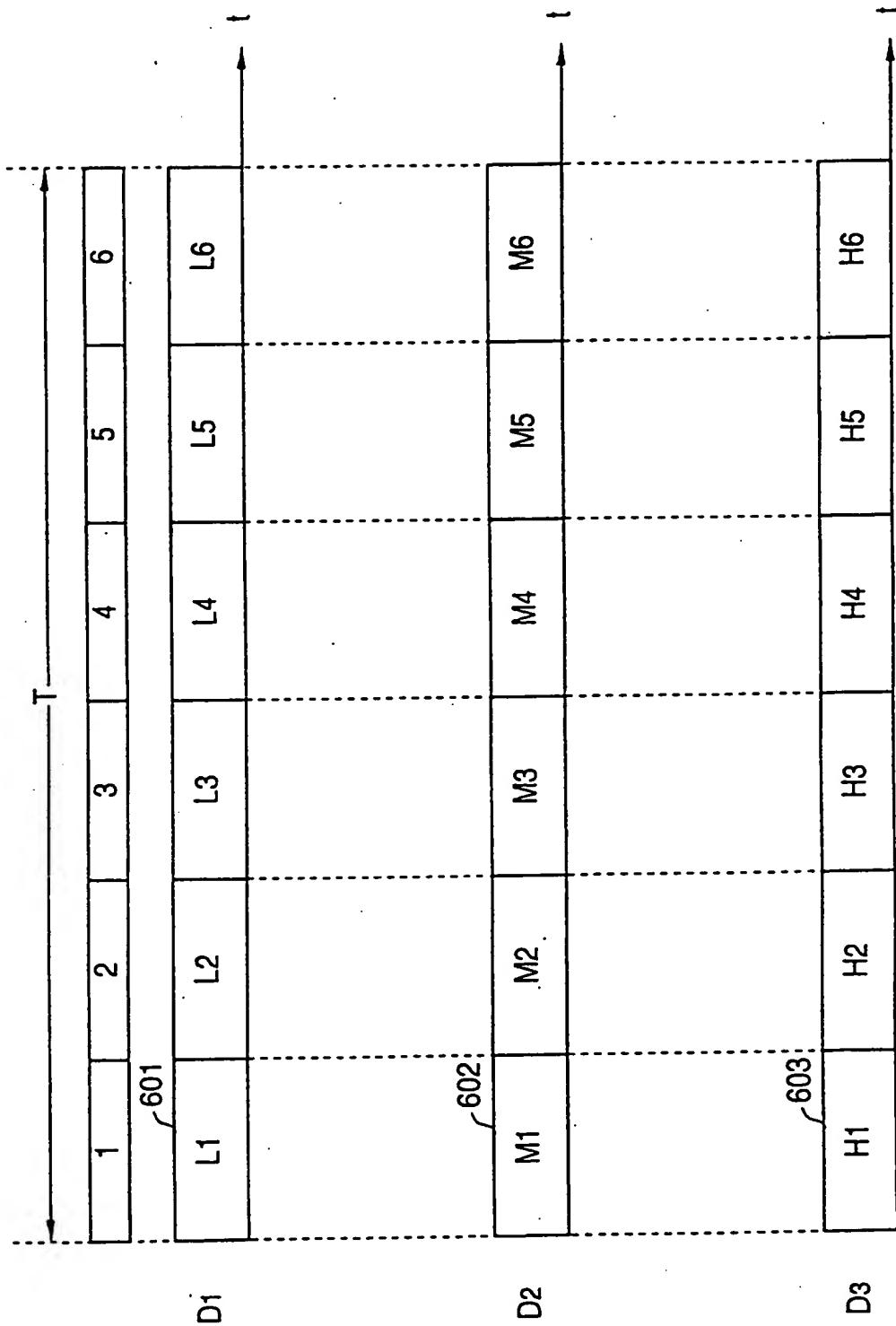


FIG. 35

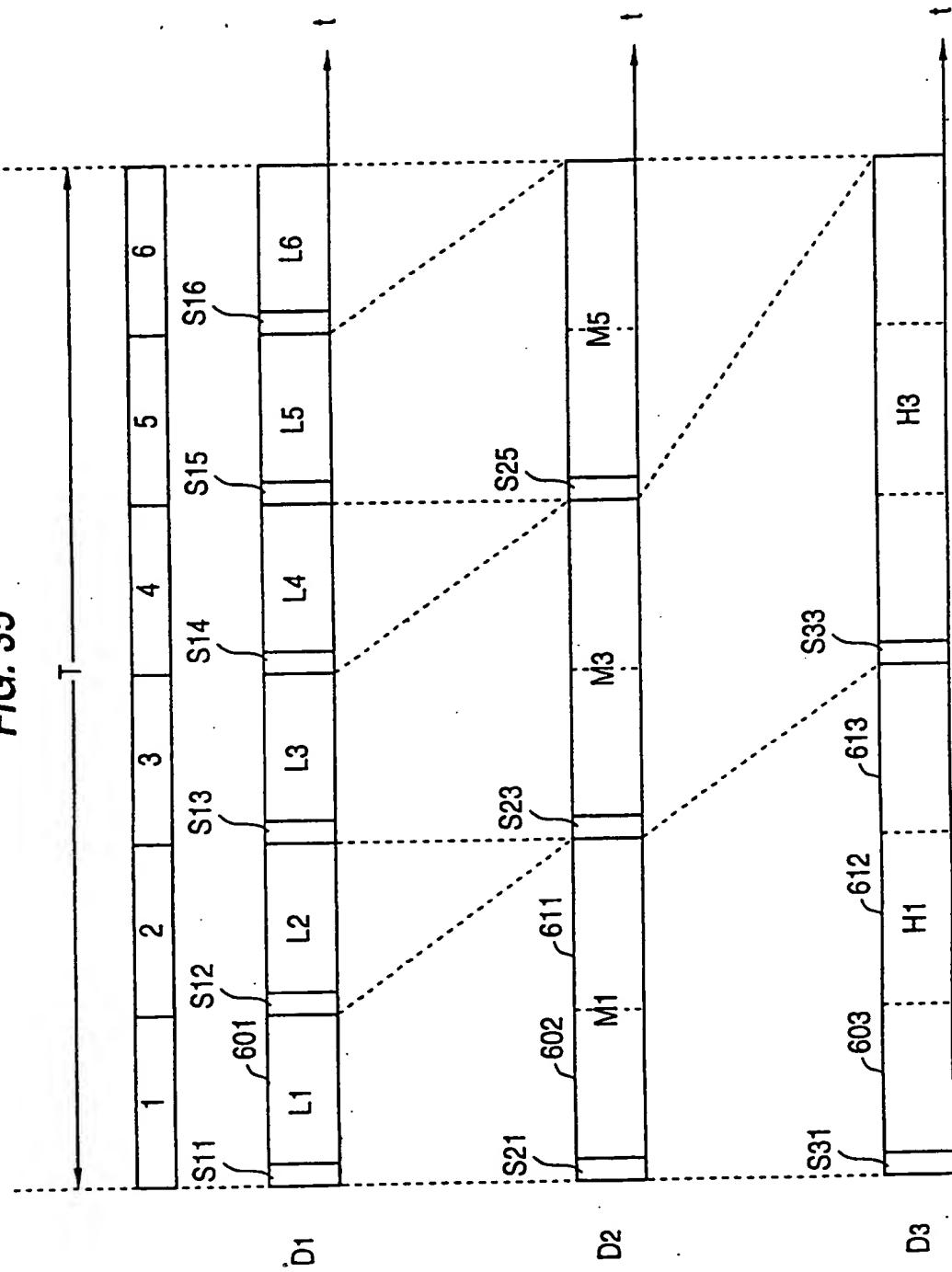
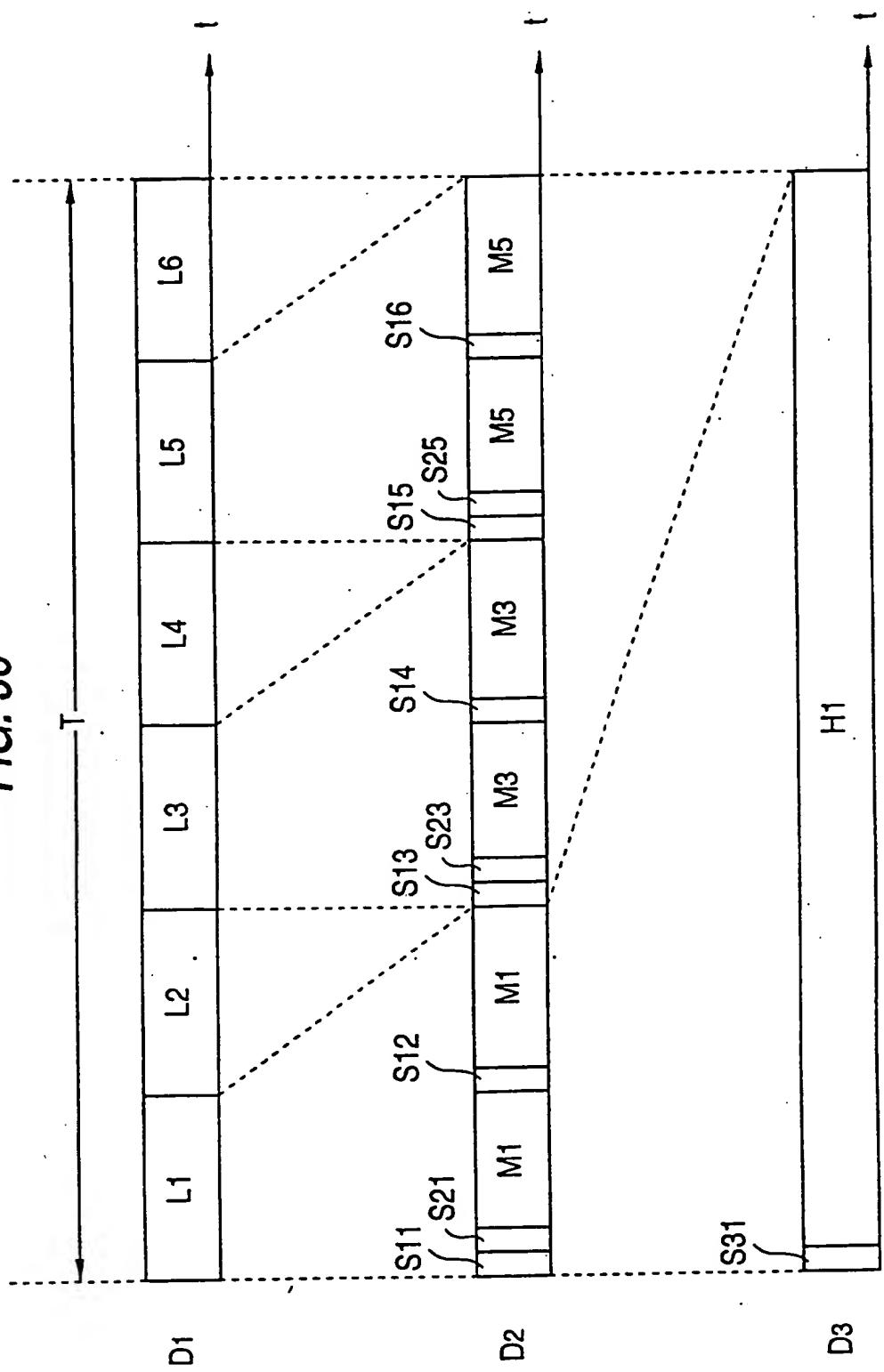


FIG. 36



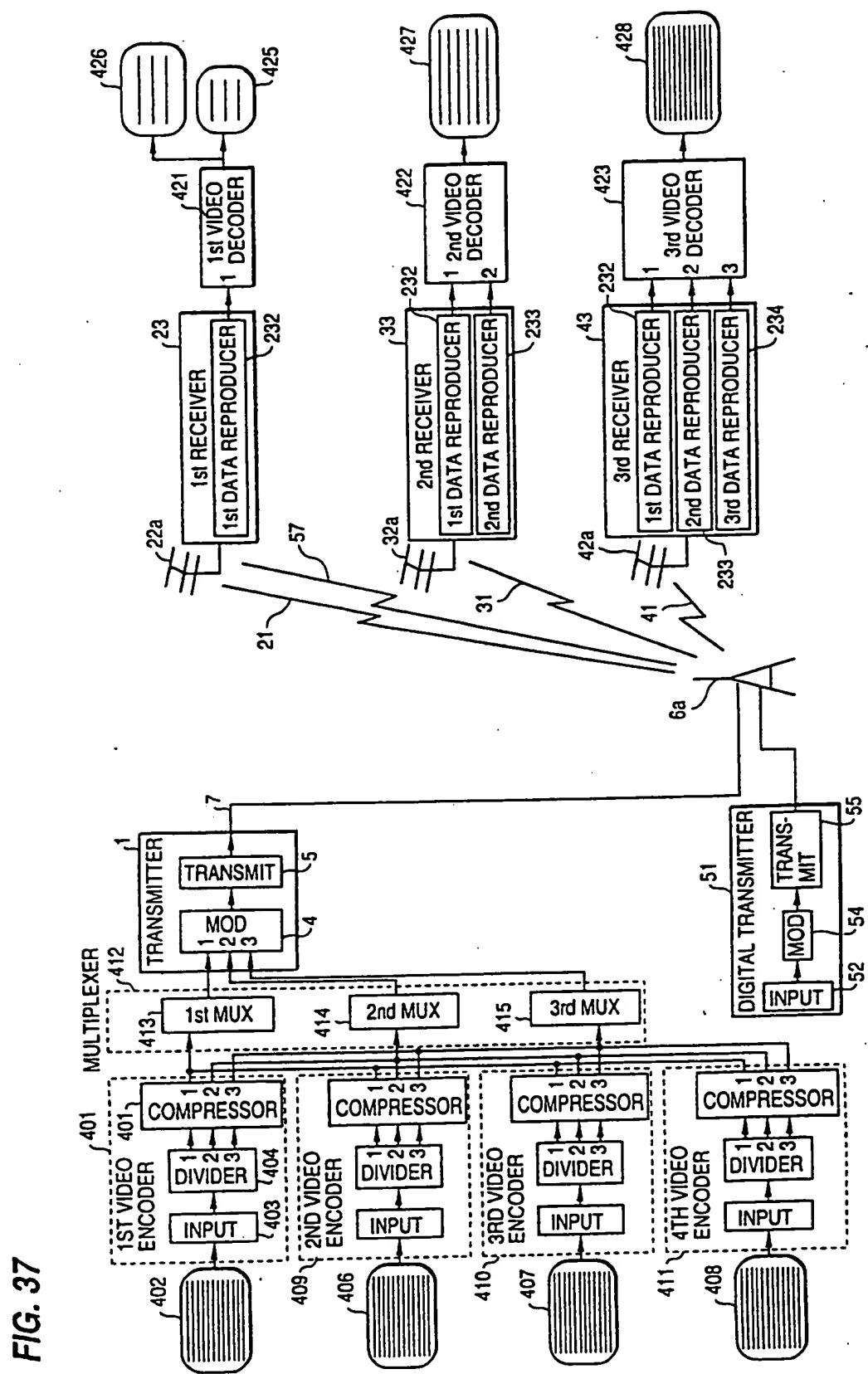


FIG. 38

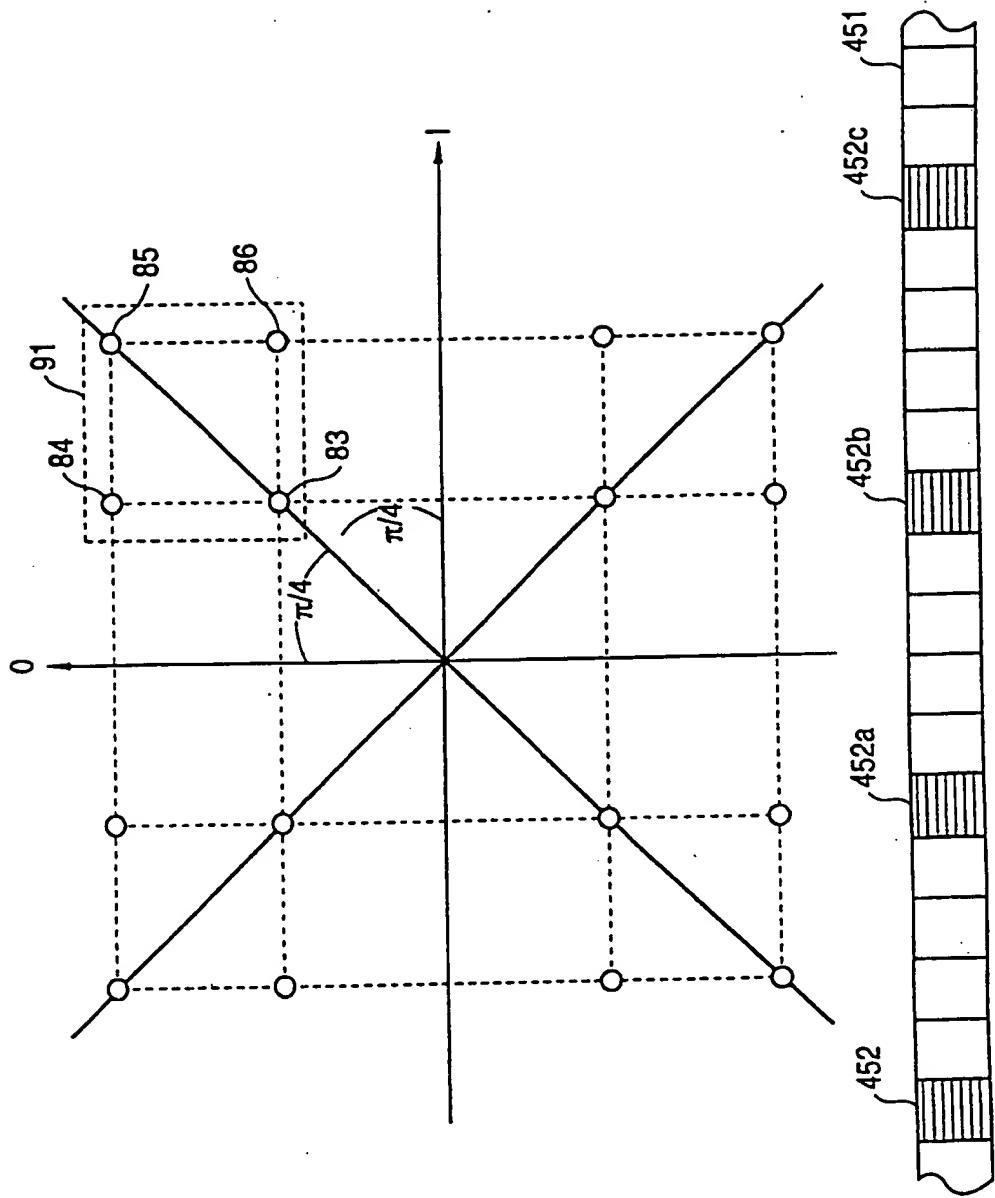


FIG. 39

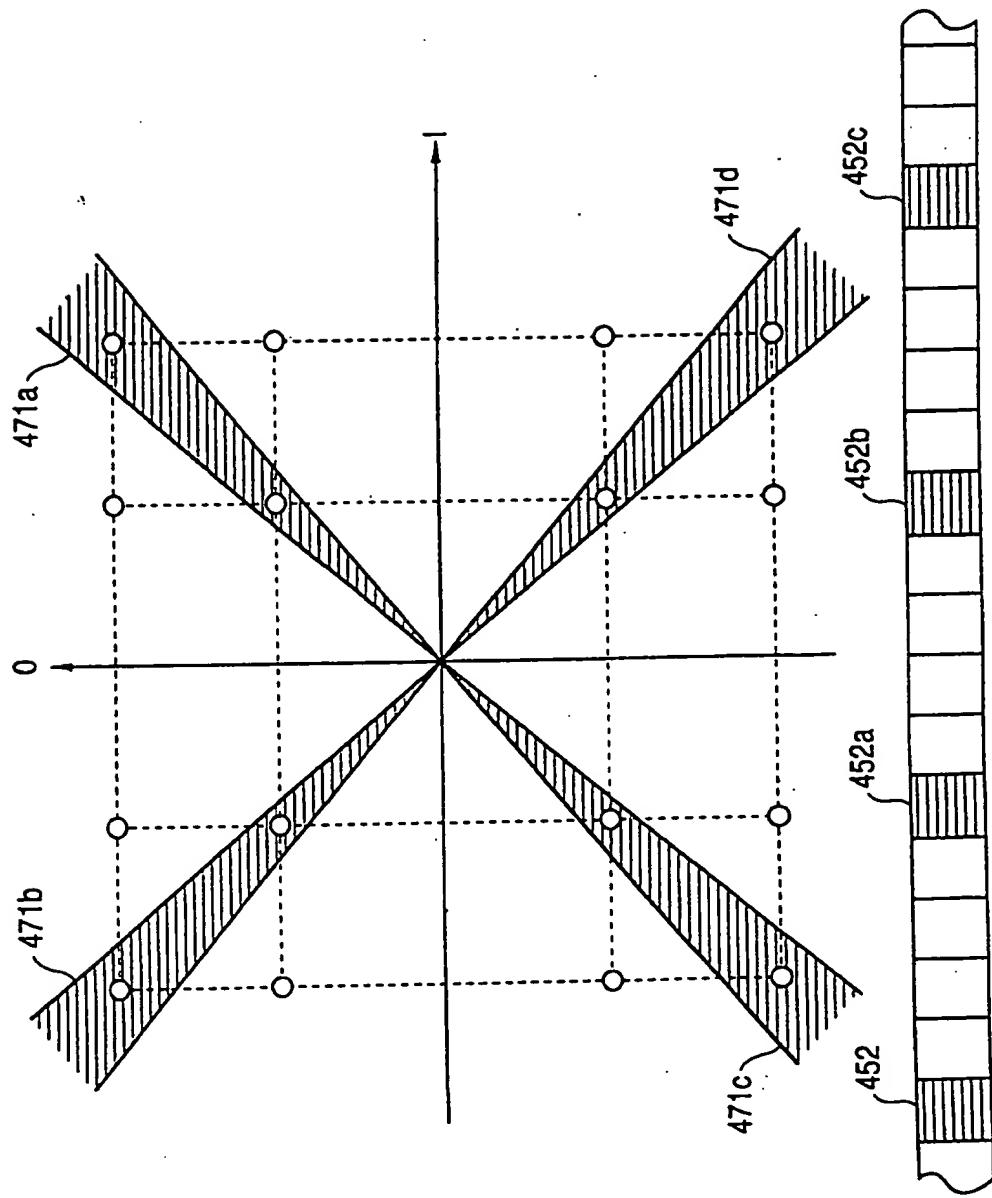


FIG. 40

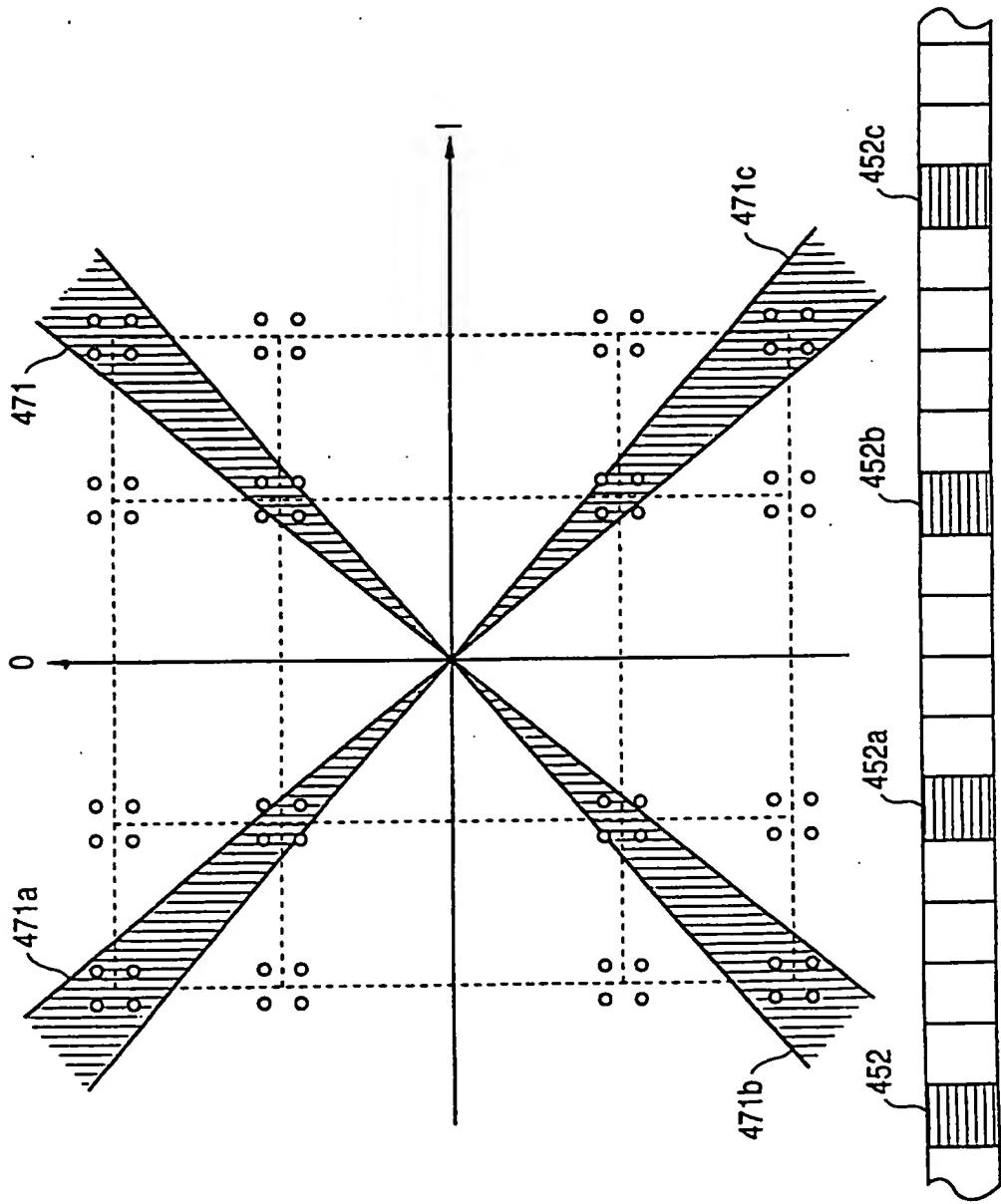
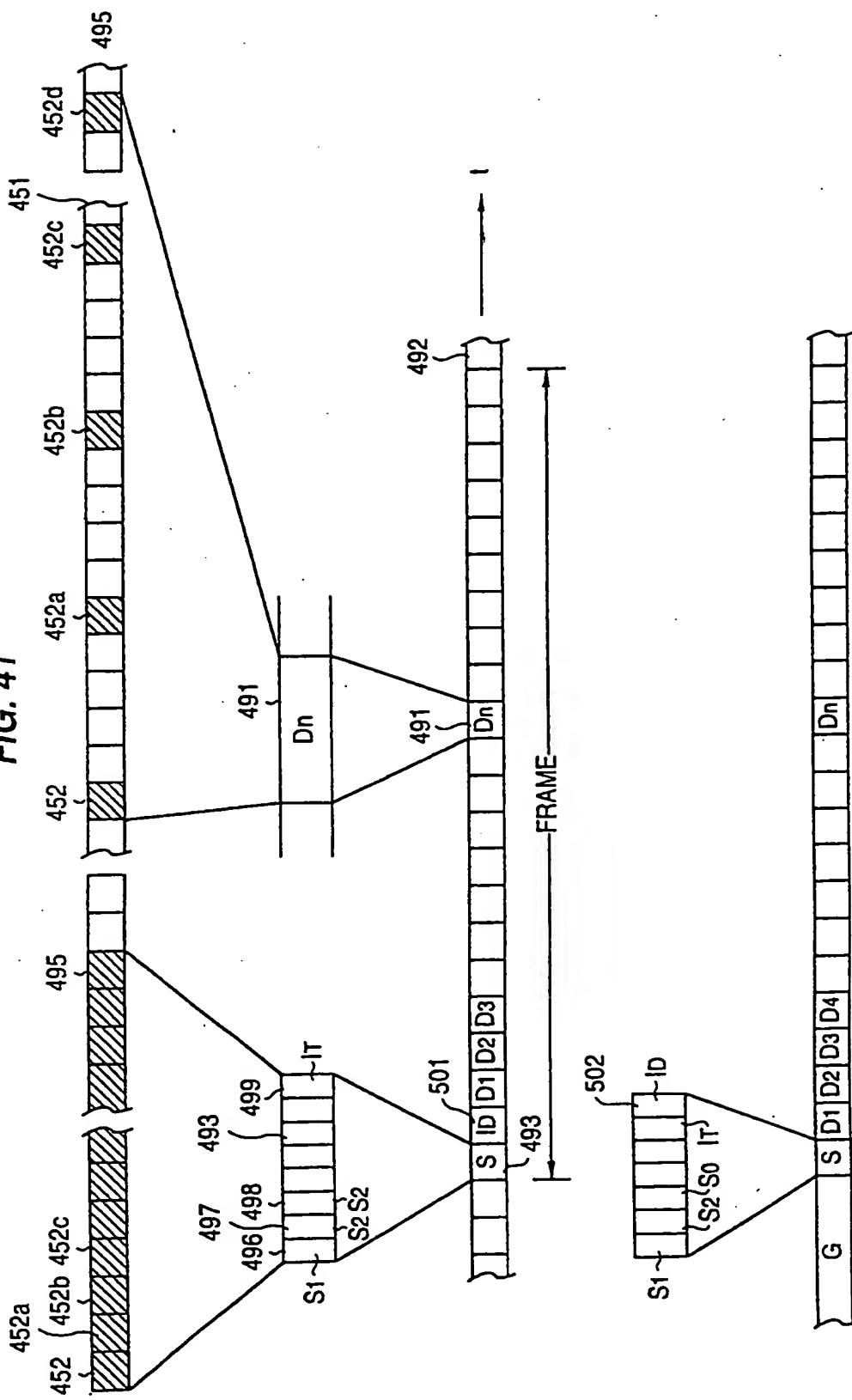


FIG. 41



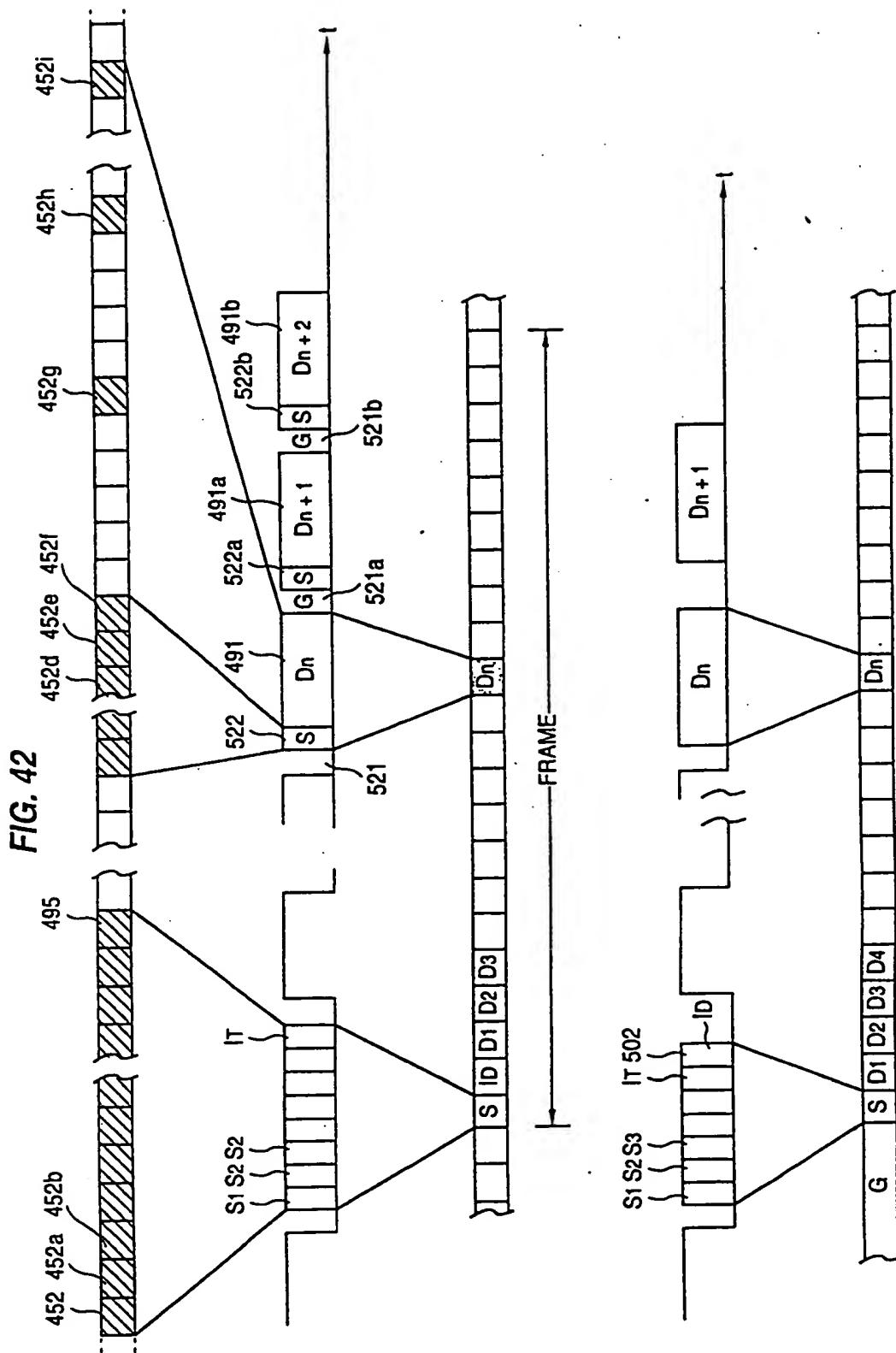


FIG. 43

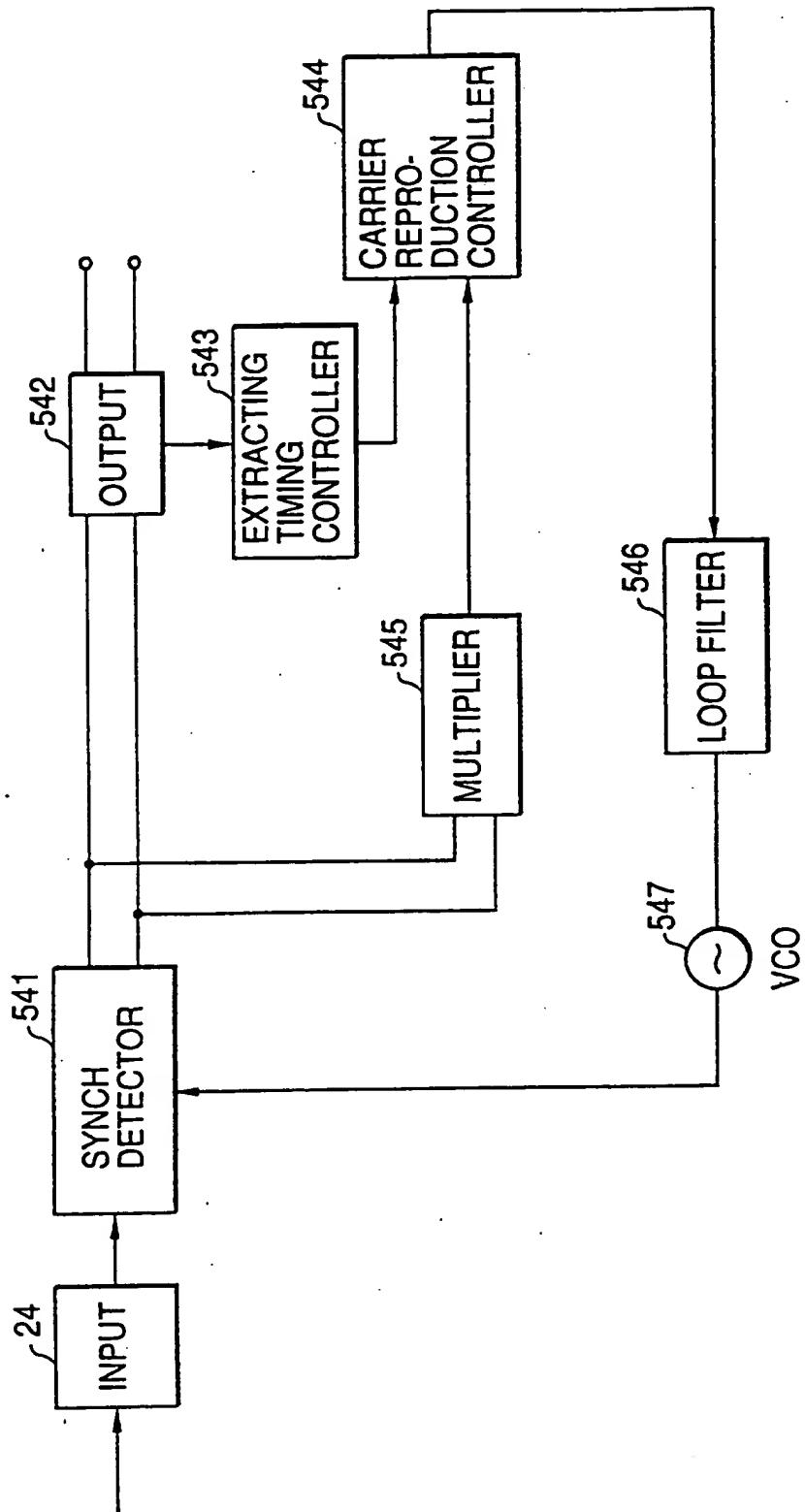
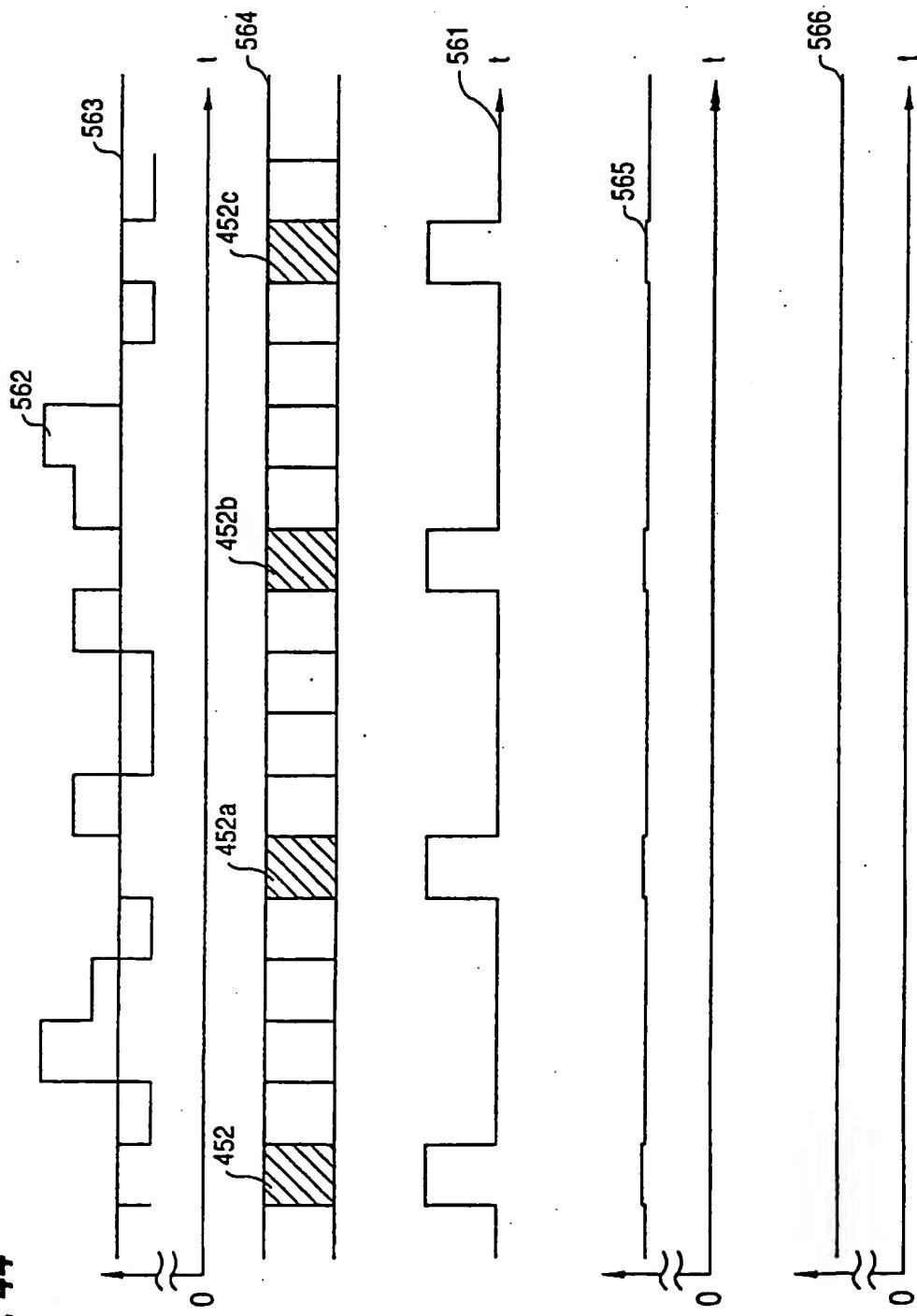


FIG. 44



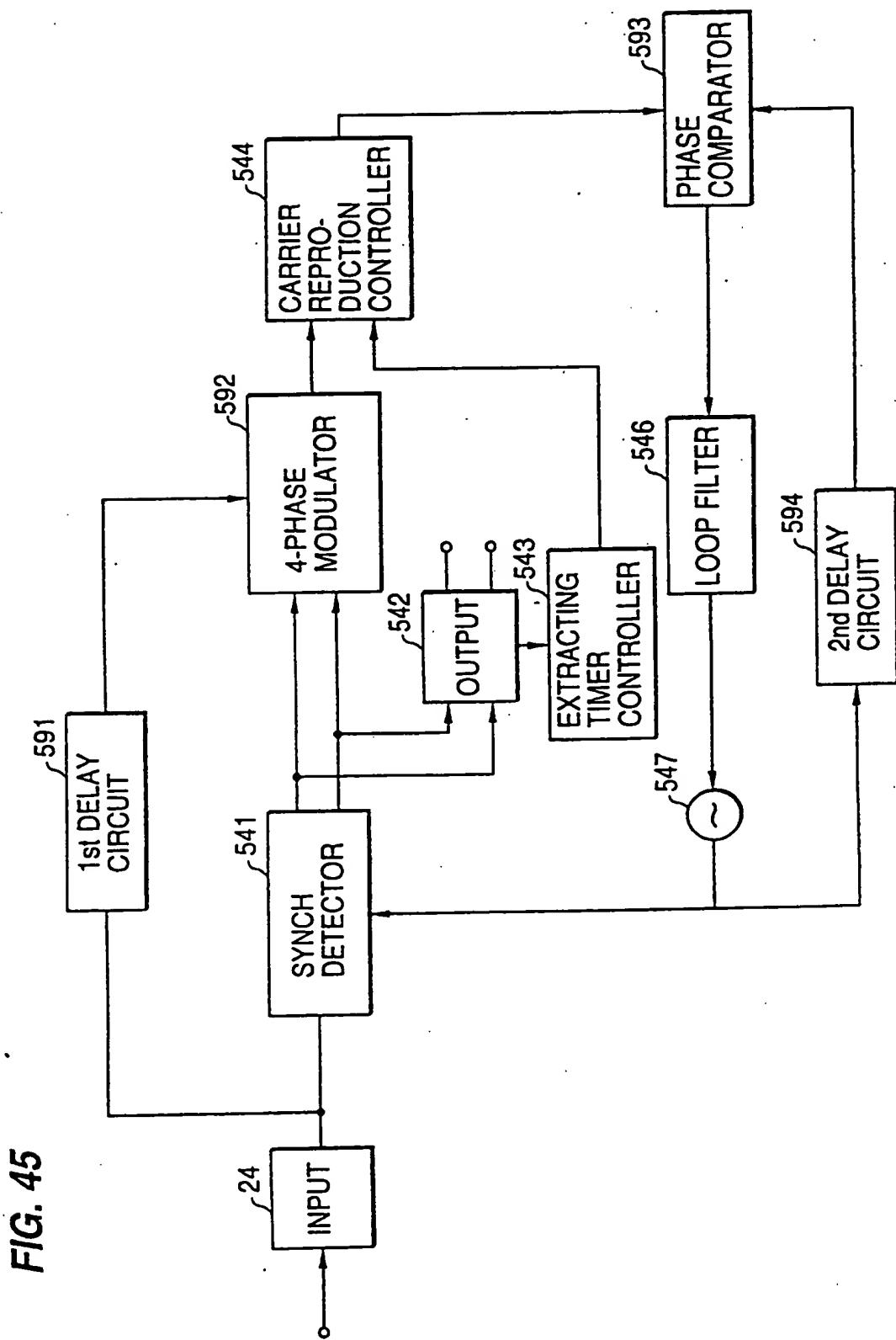


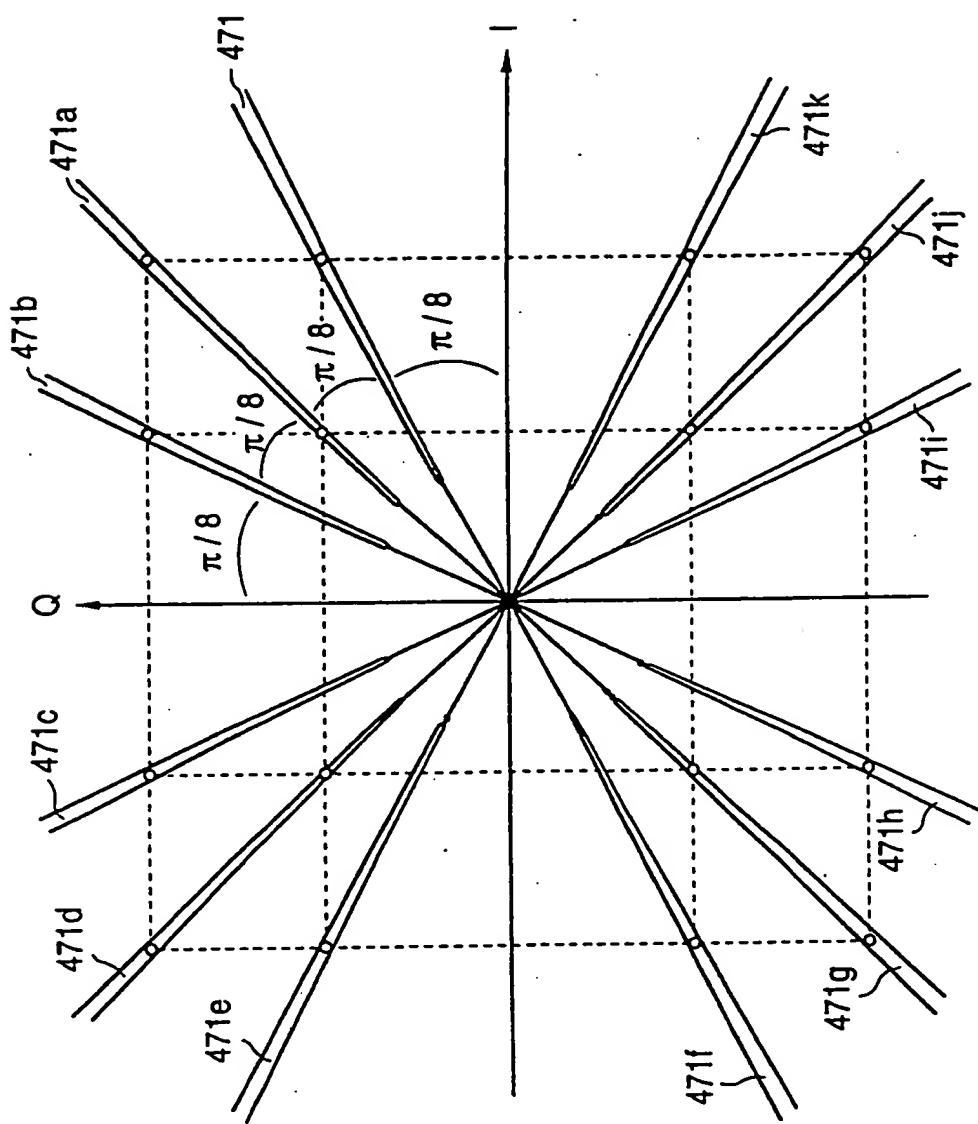
FIG. 46

FIG. 47

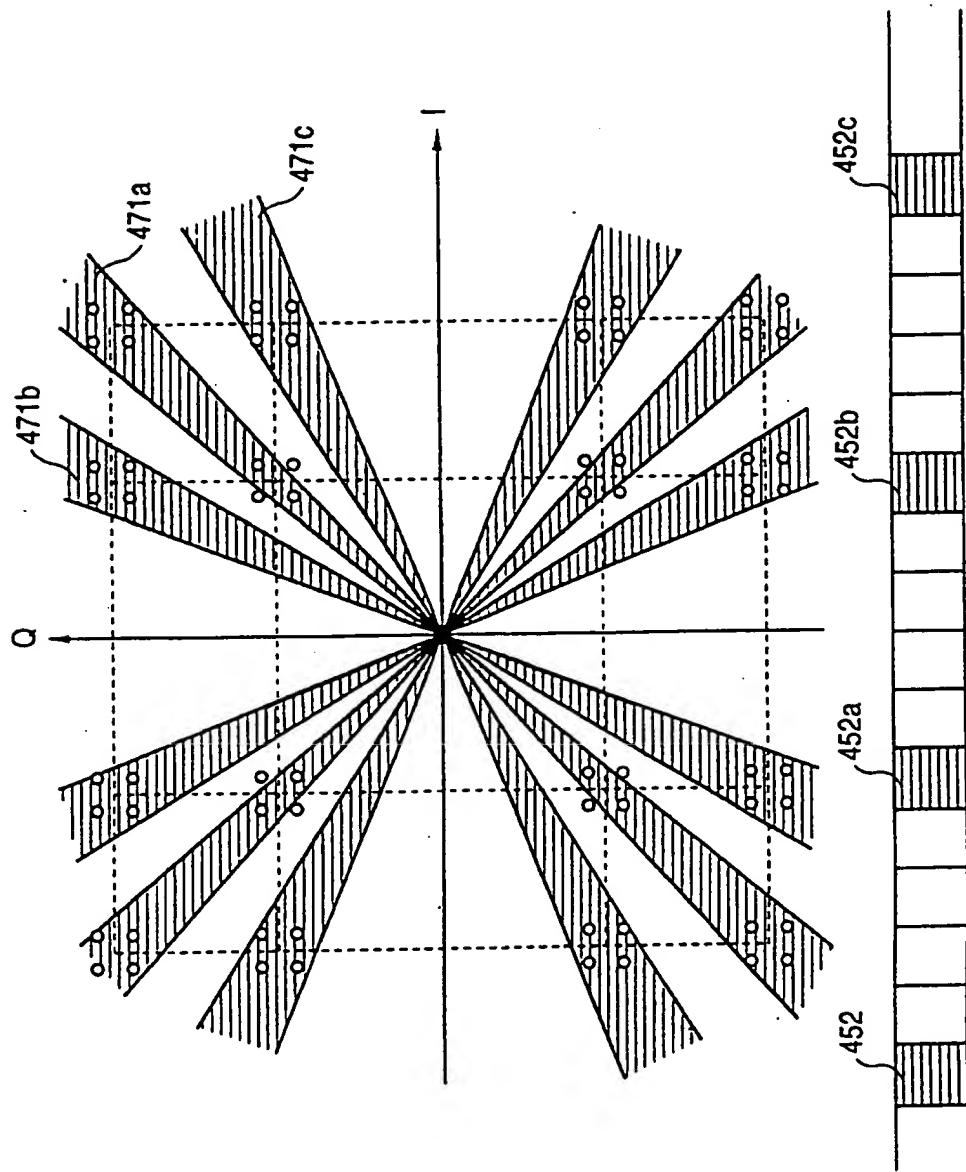


FIG. 48 (Amended)

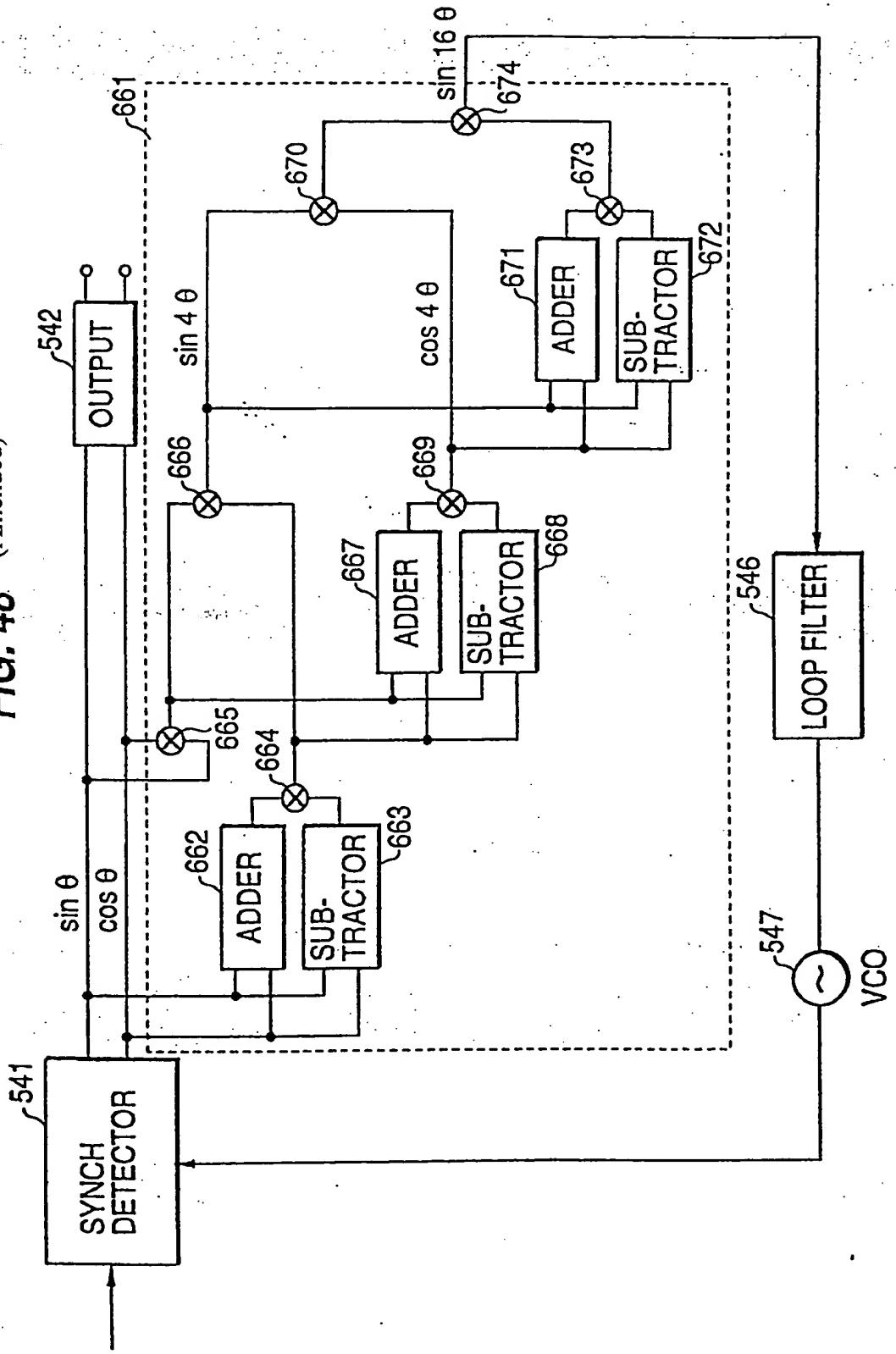


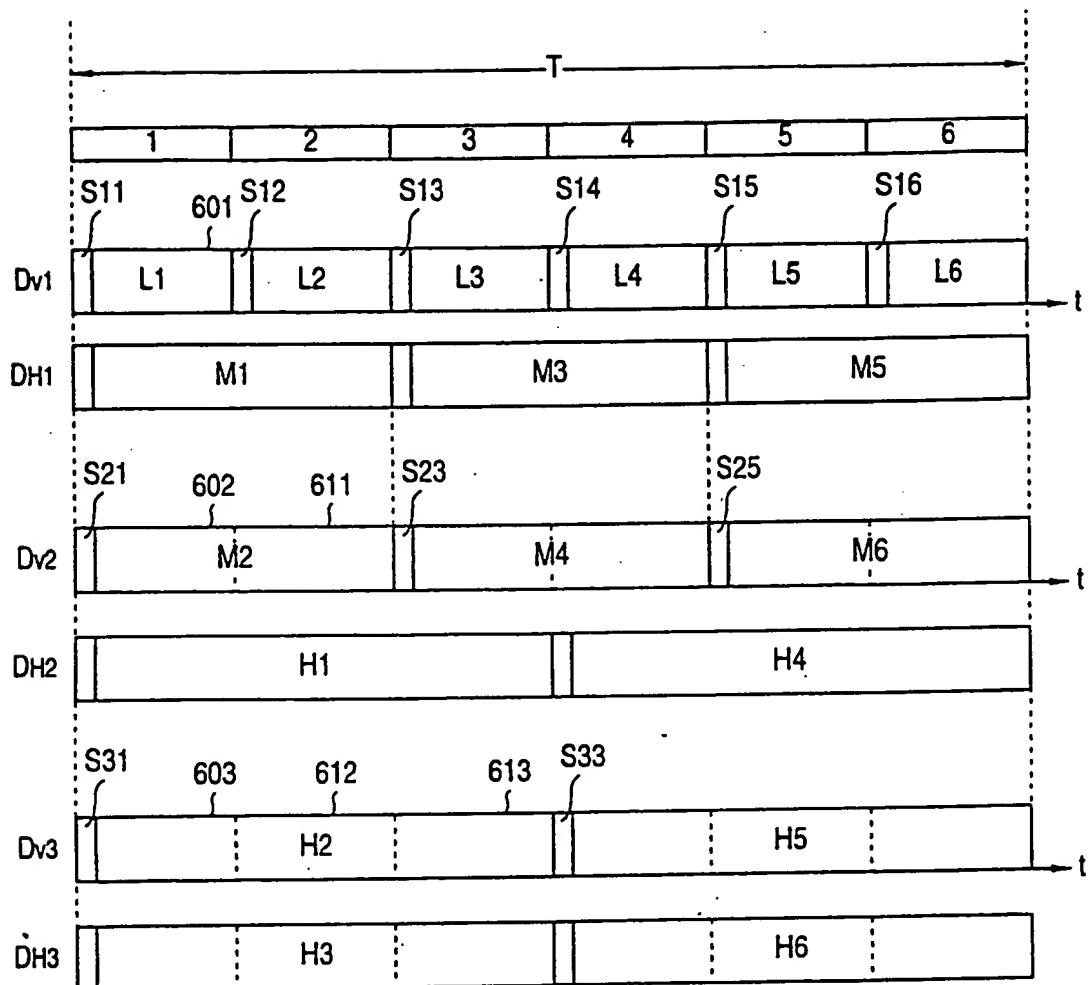
FIG. 49

FIG. 50

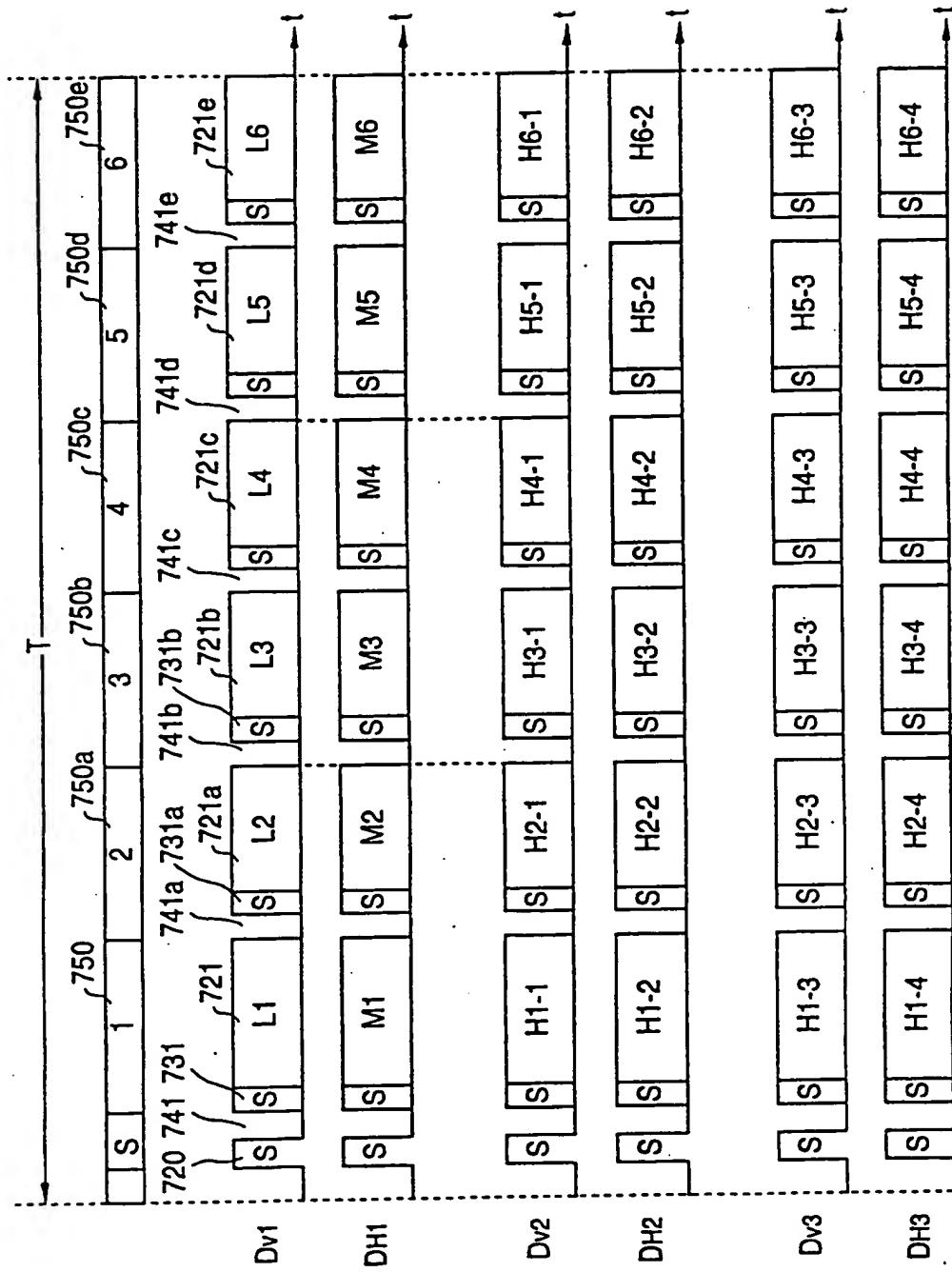


FIG. 51

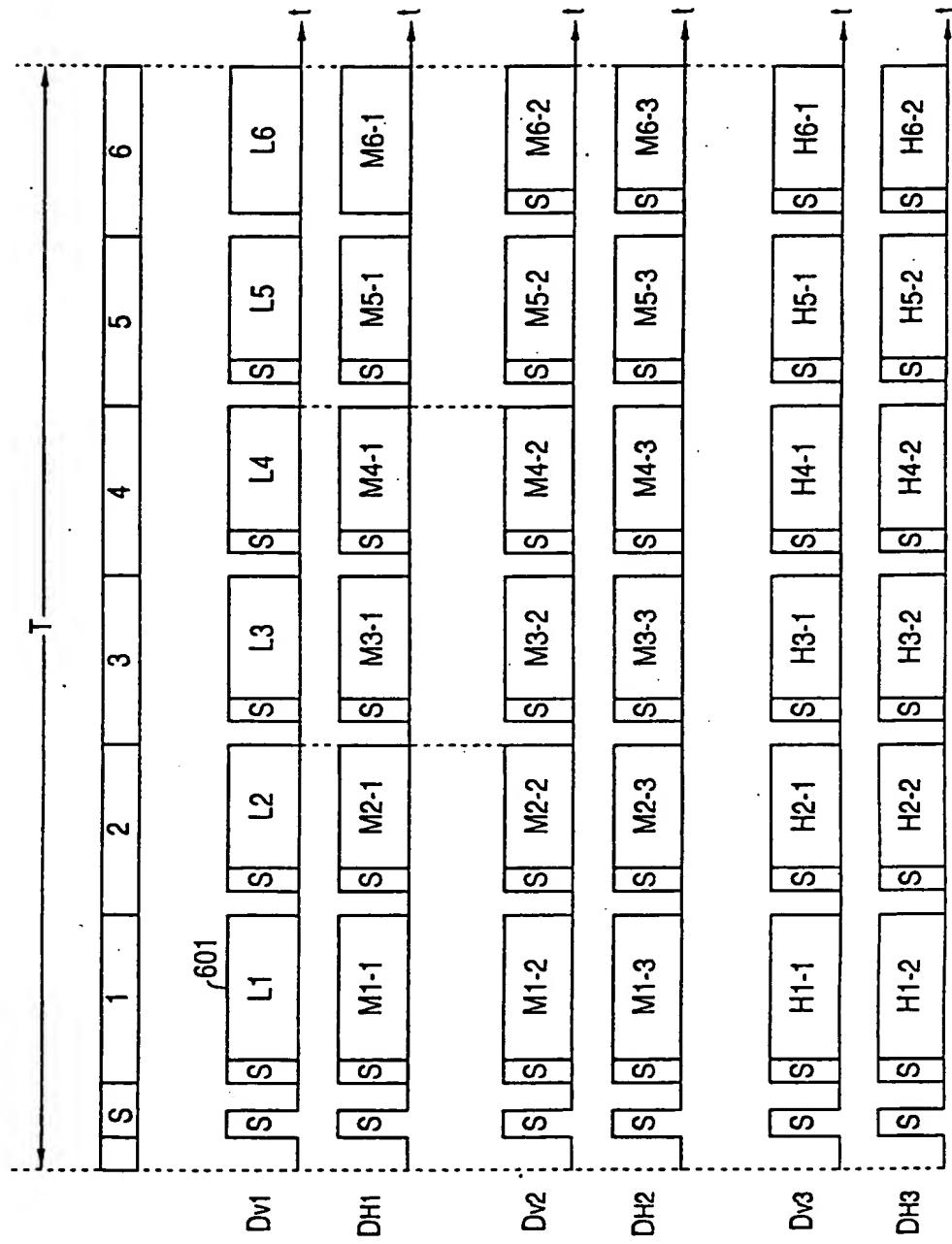


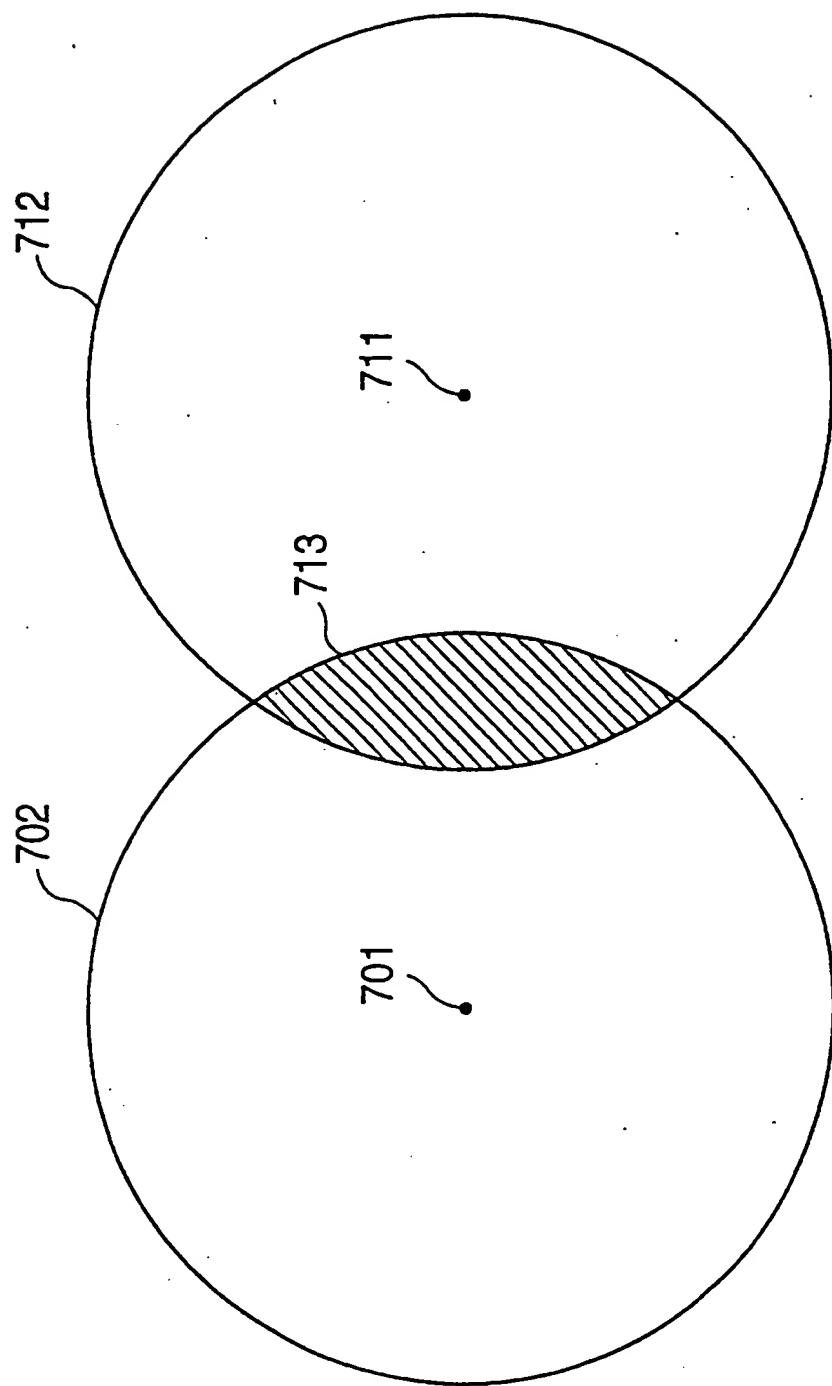
FIG. 52

FIG. 53

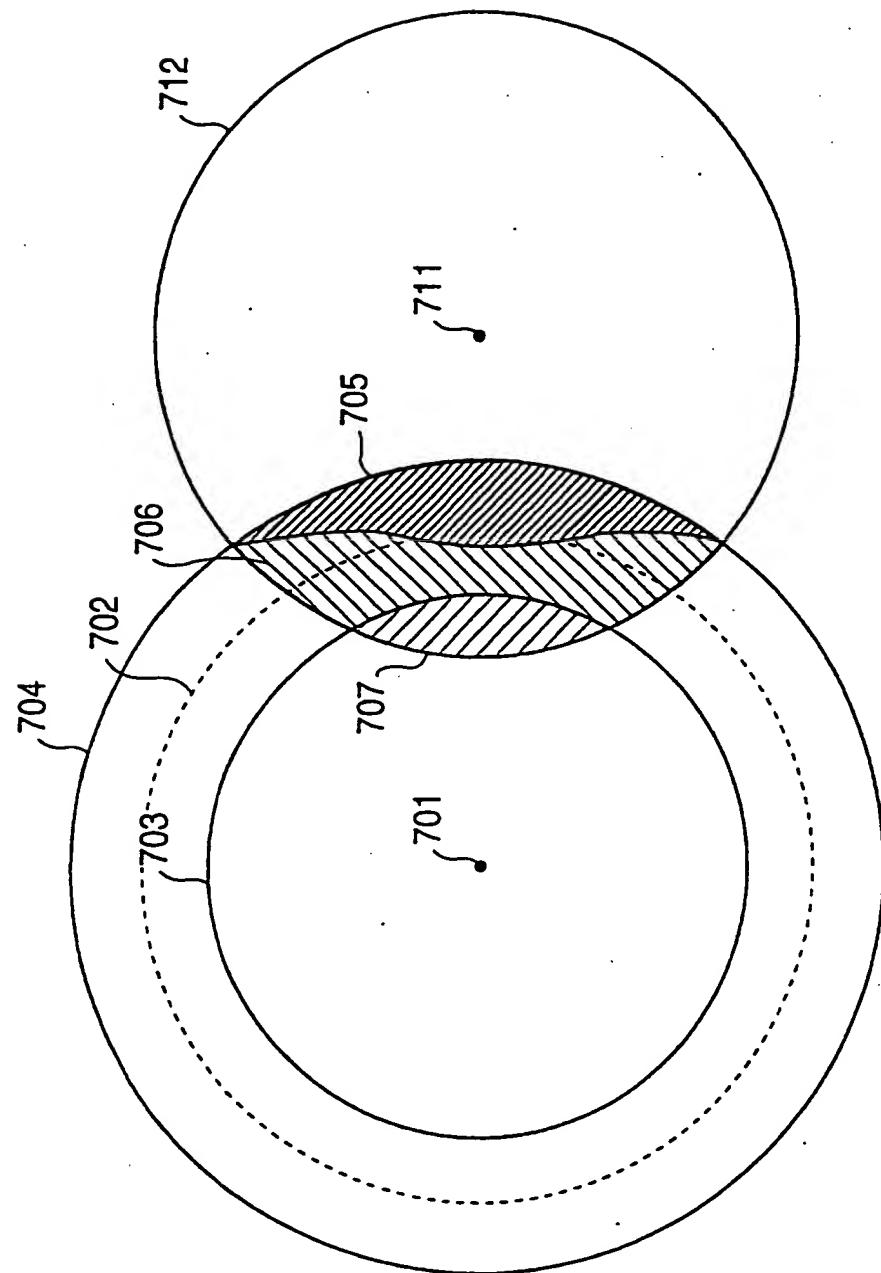


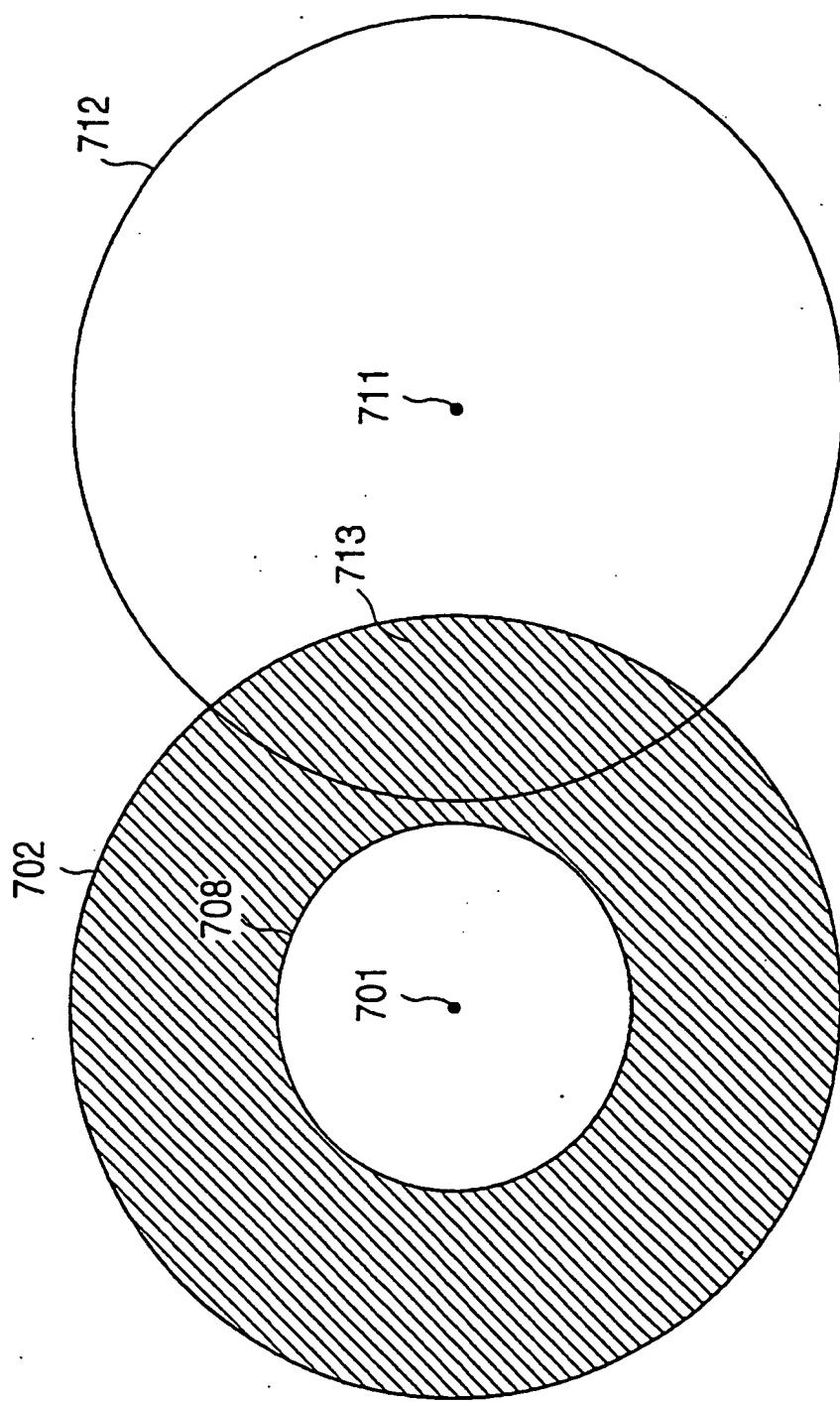
FIG. 54

FIG. 55

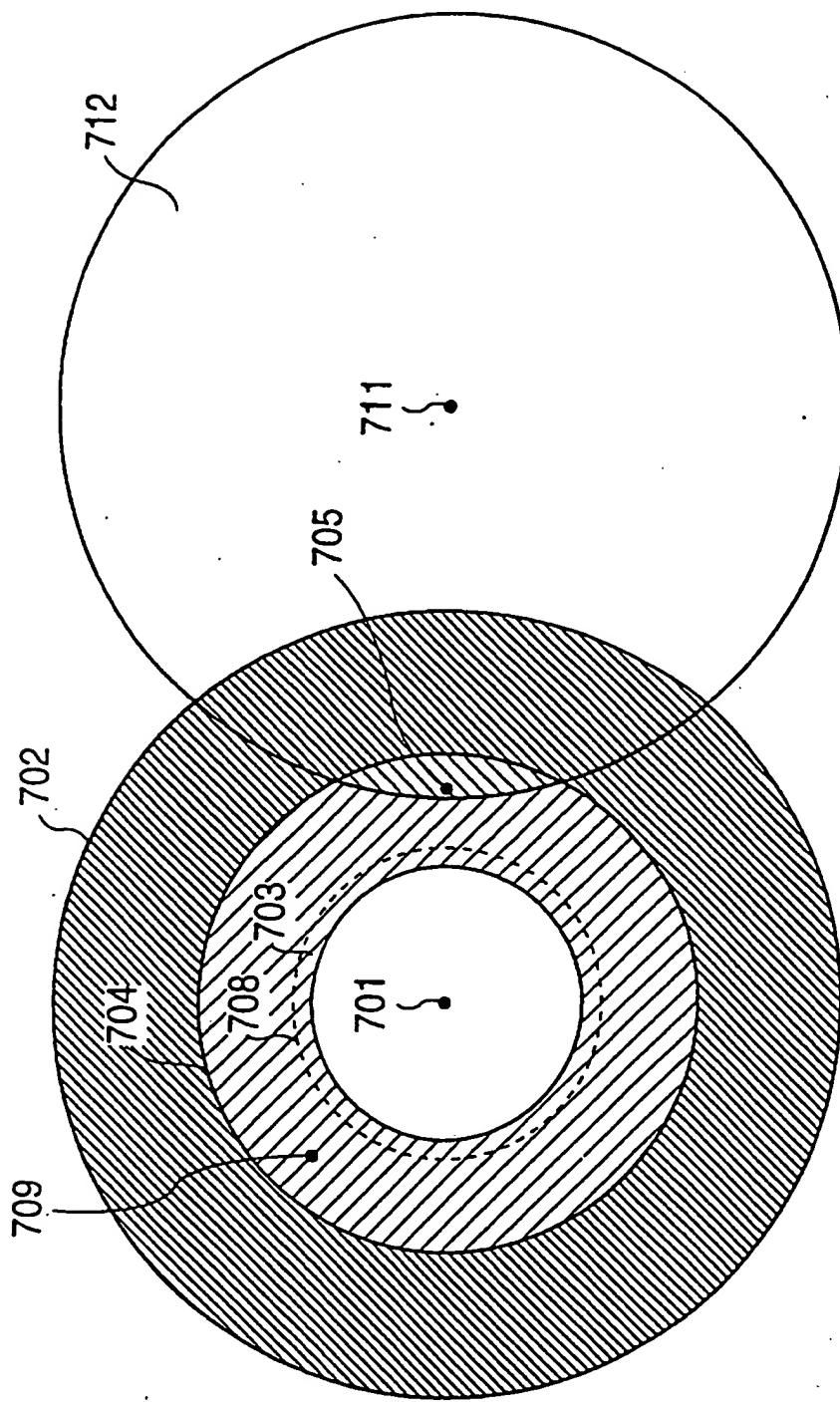


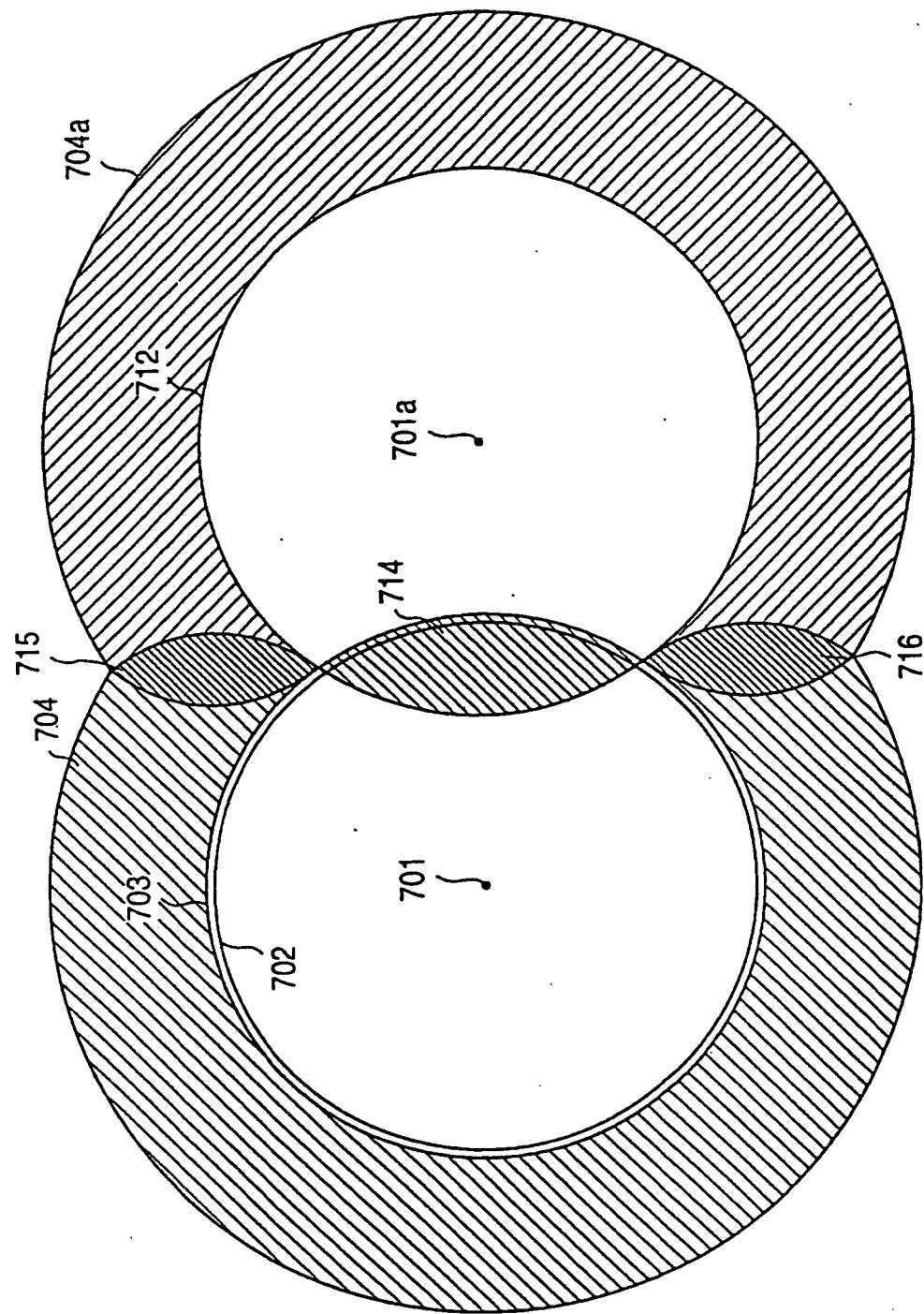
FIG. 56

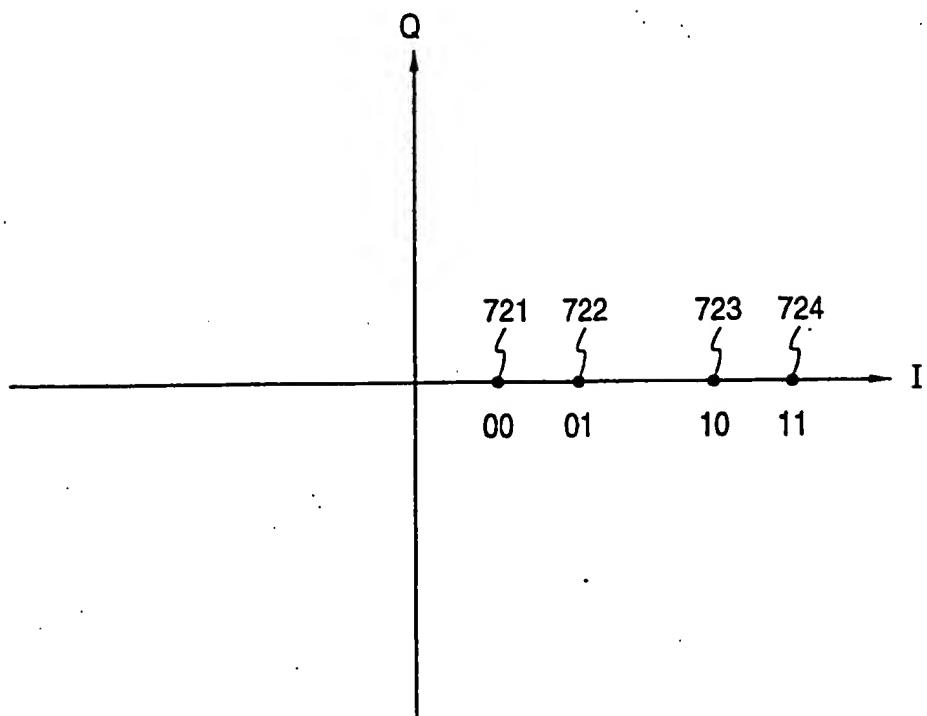
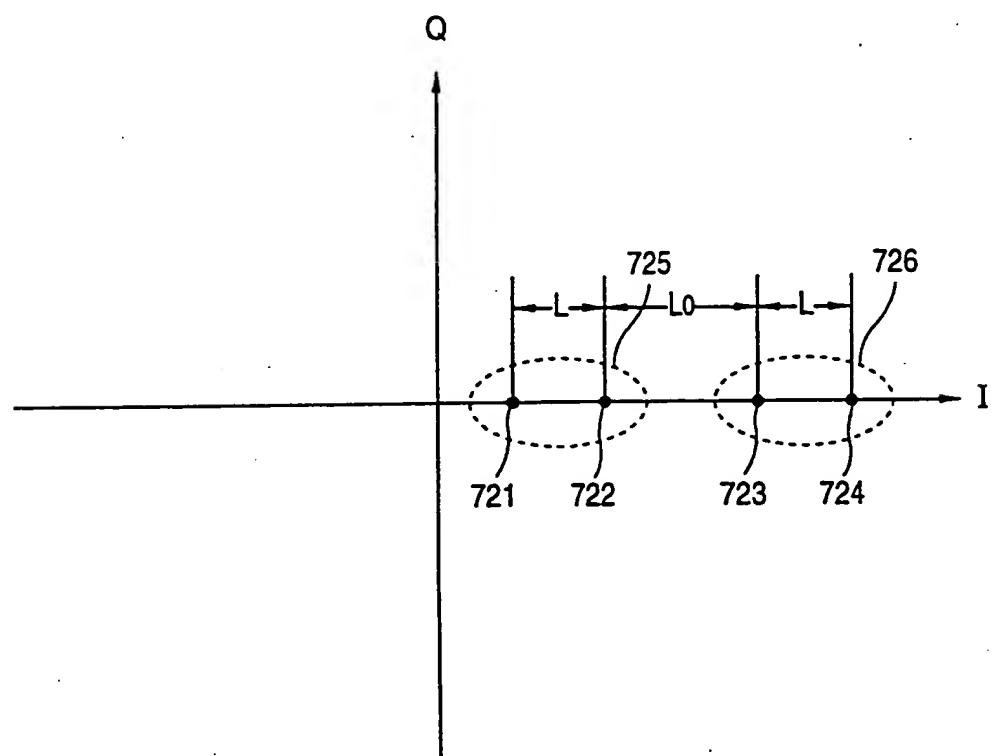
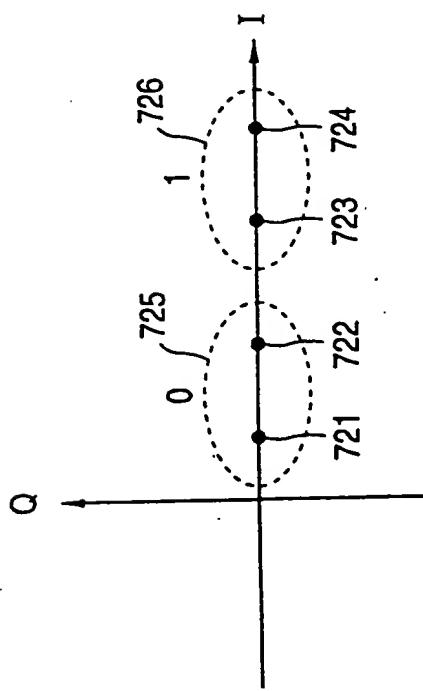
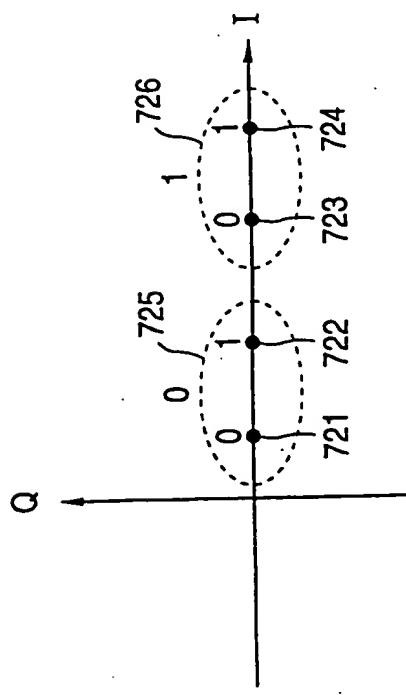
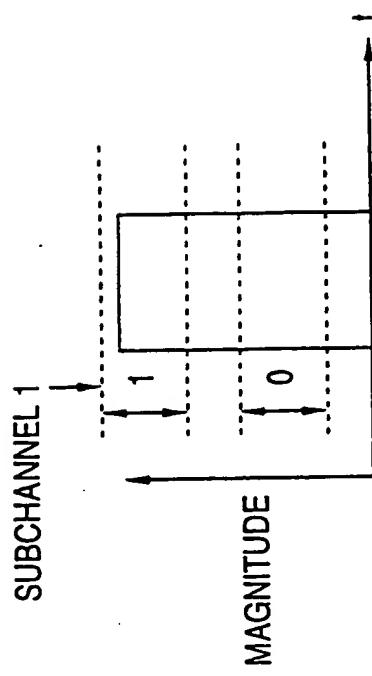
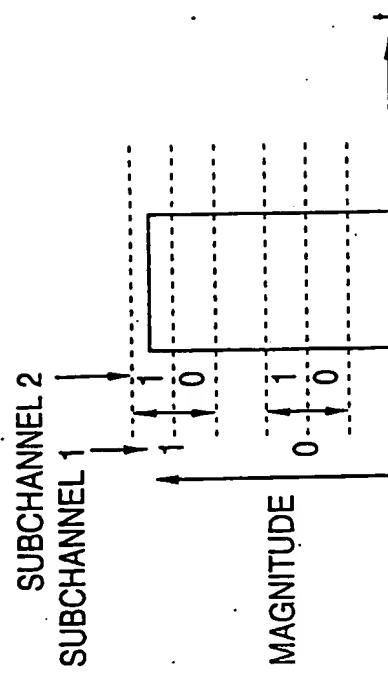
FIG. 57**FIG. 58**

FIG. 59(a)**FIG. 59(b)****FIG. 59(c)****FIG. 59(d)**

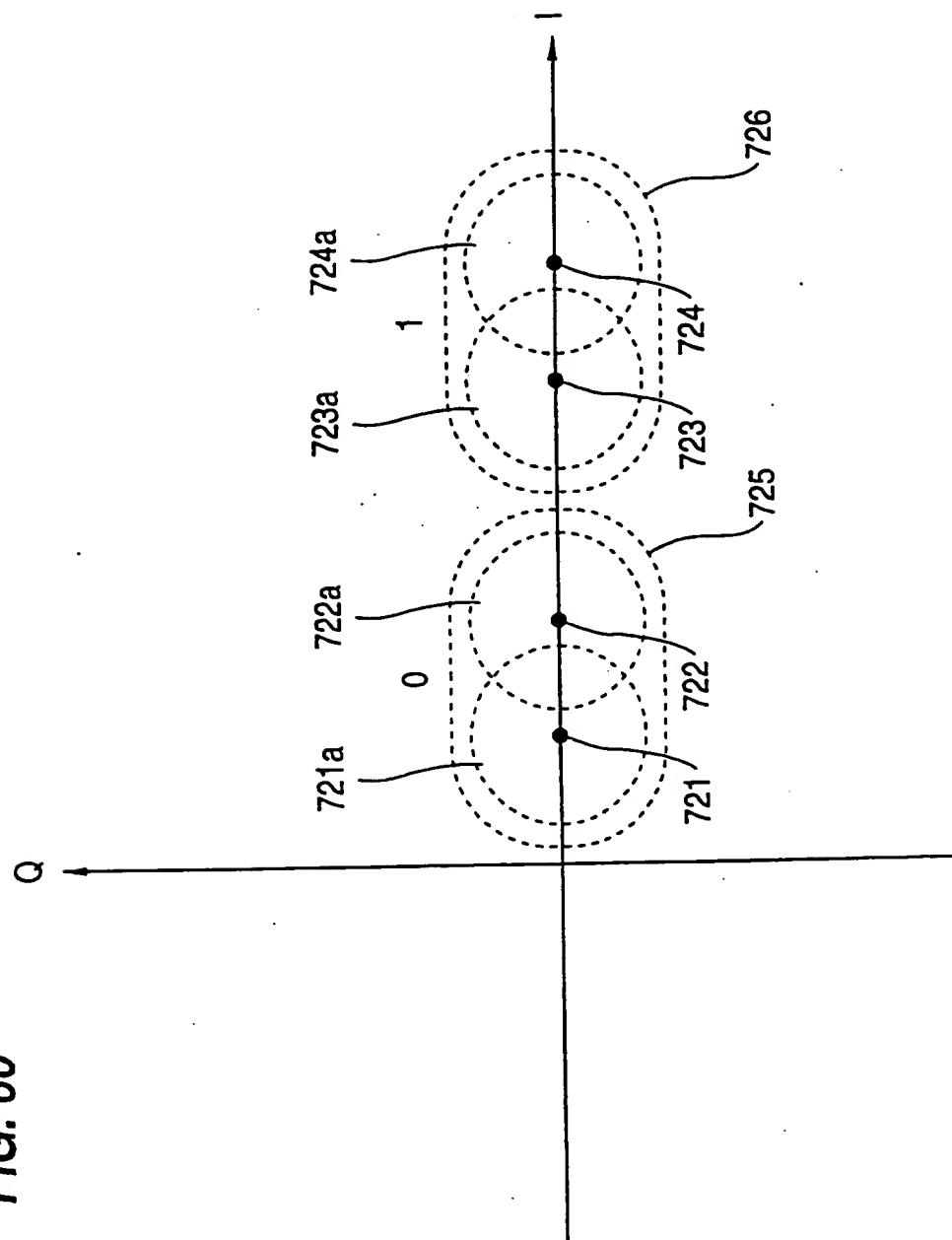


FIG. 60

FIG. 61

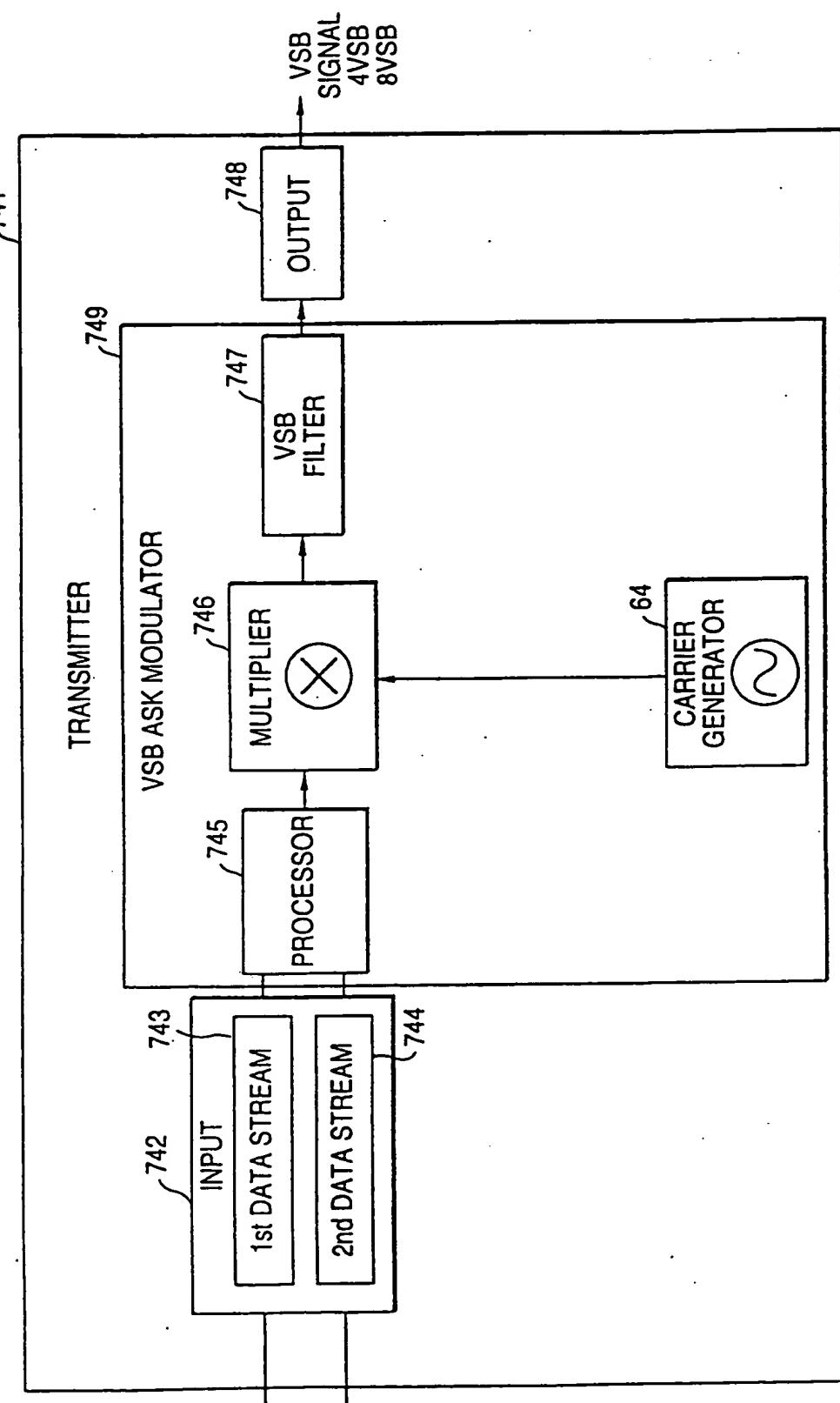
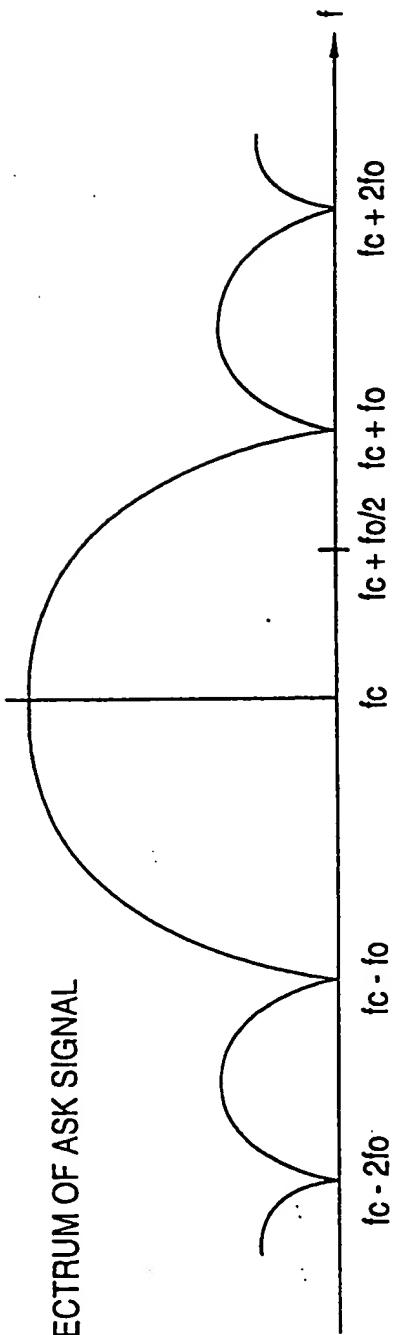


FIG. 62(a)

CARRIER
SPECTRUM OF ASK SIGNAL

**FIG. 62(b)**

CHARACTERISTICS OF VSB FILTER

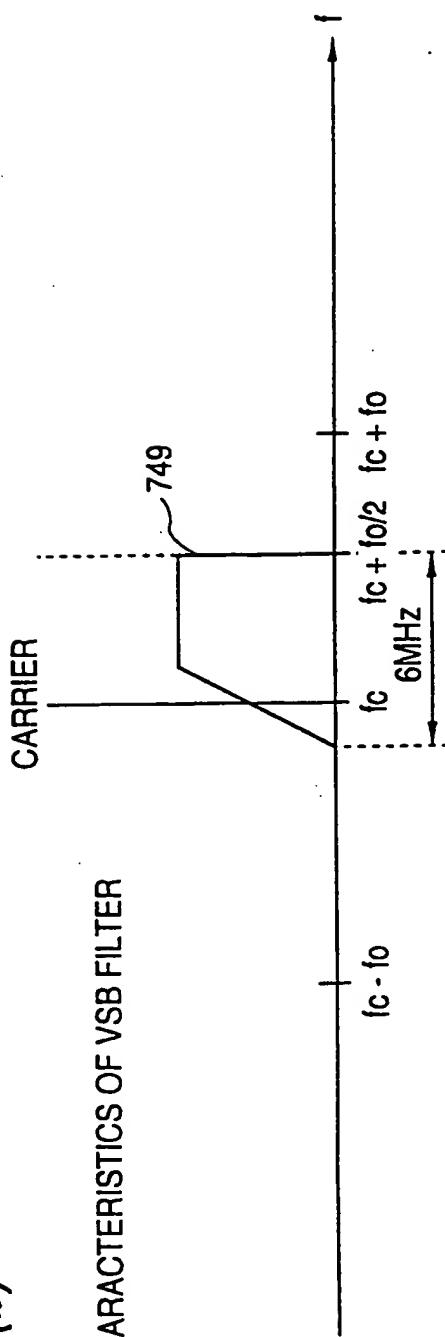
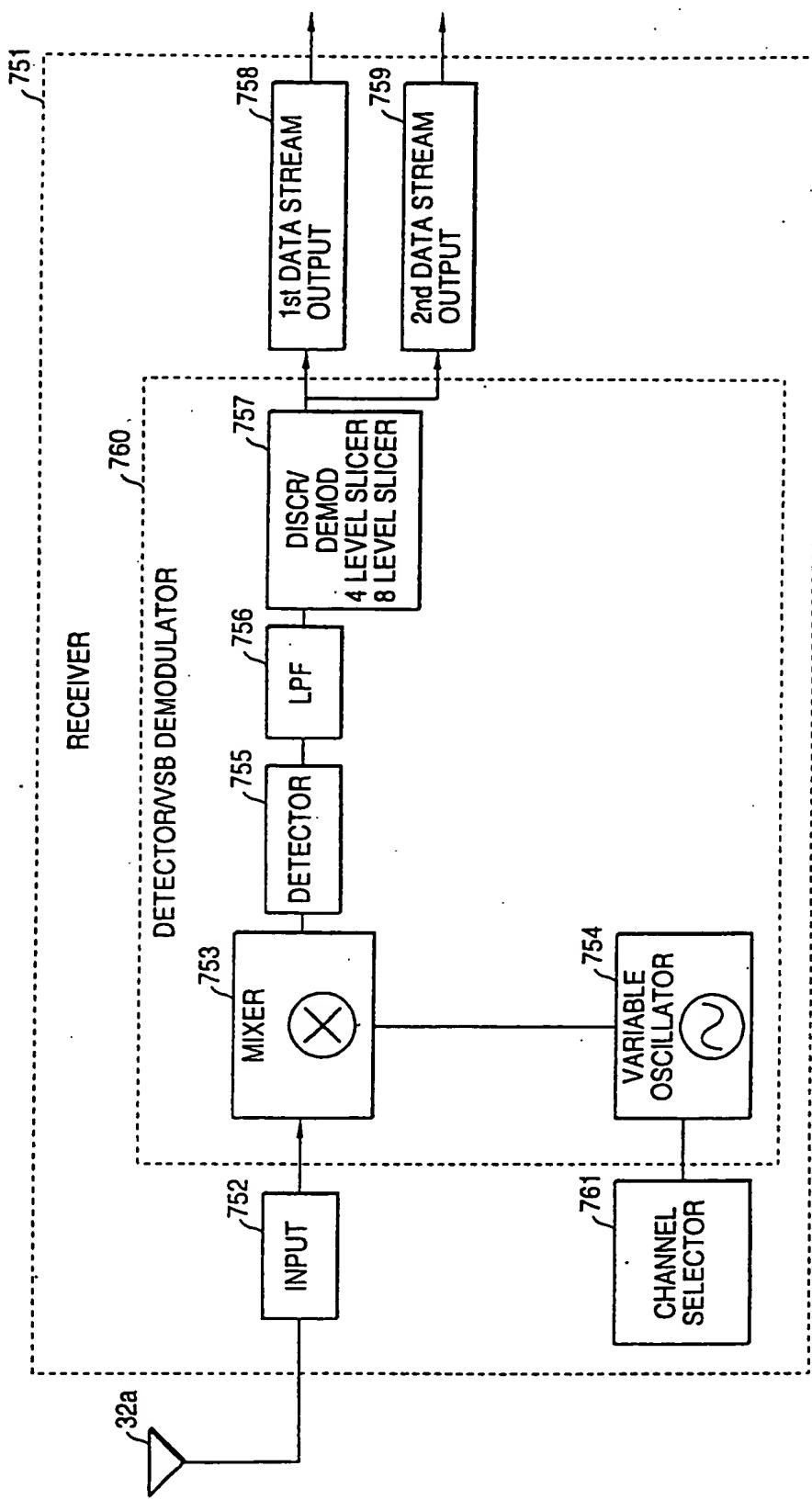
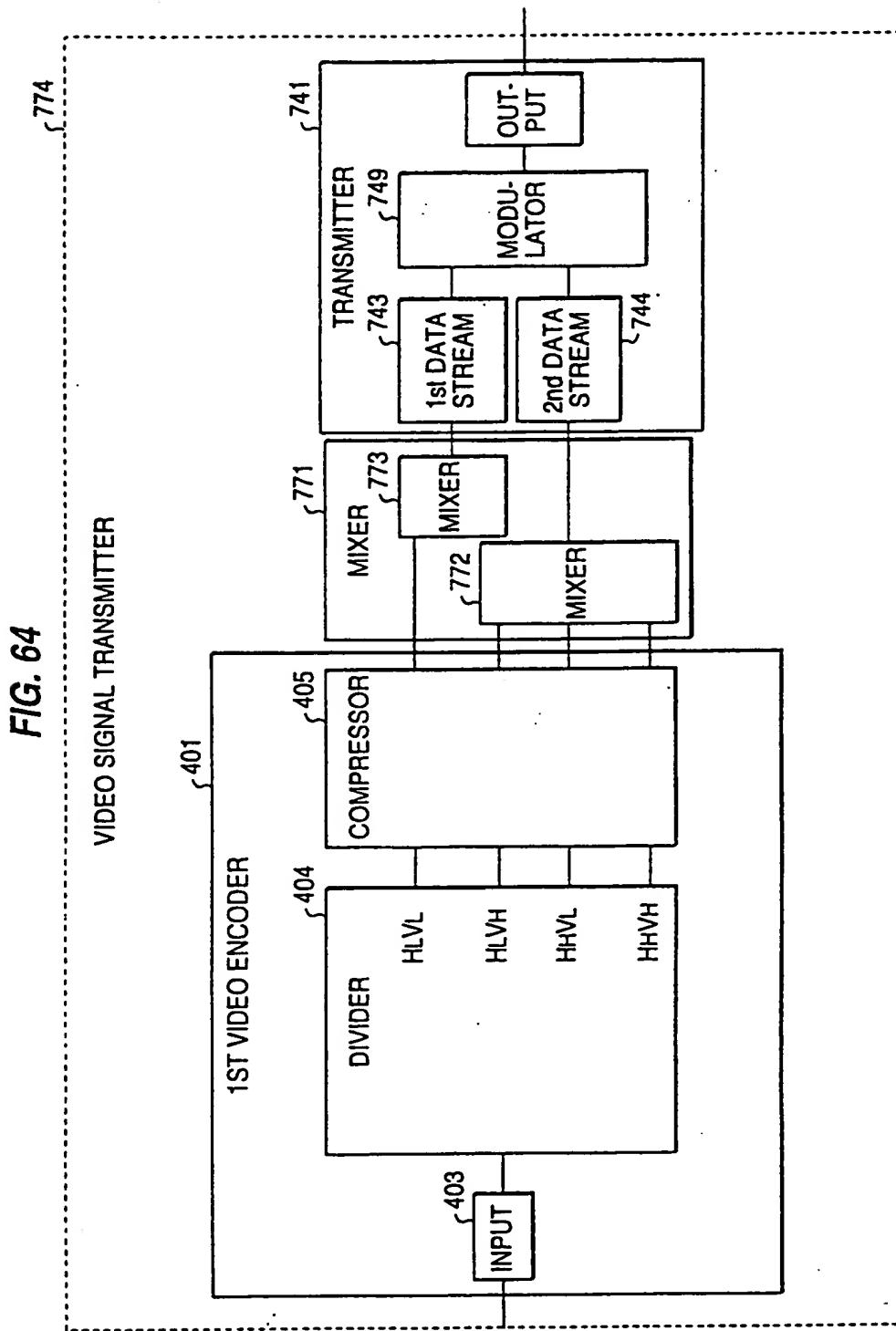


FIG. 63





F/G. 65 (Amended)

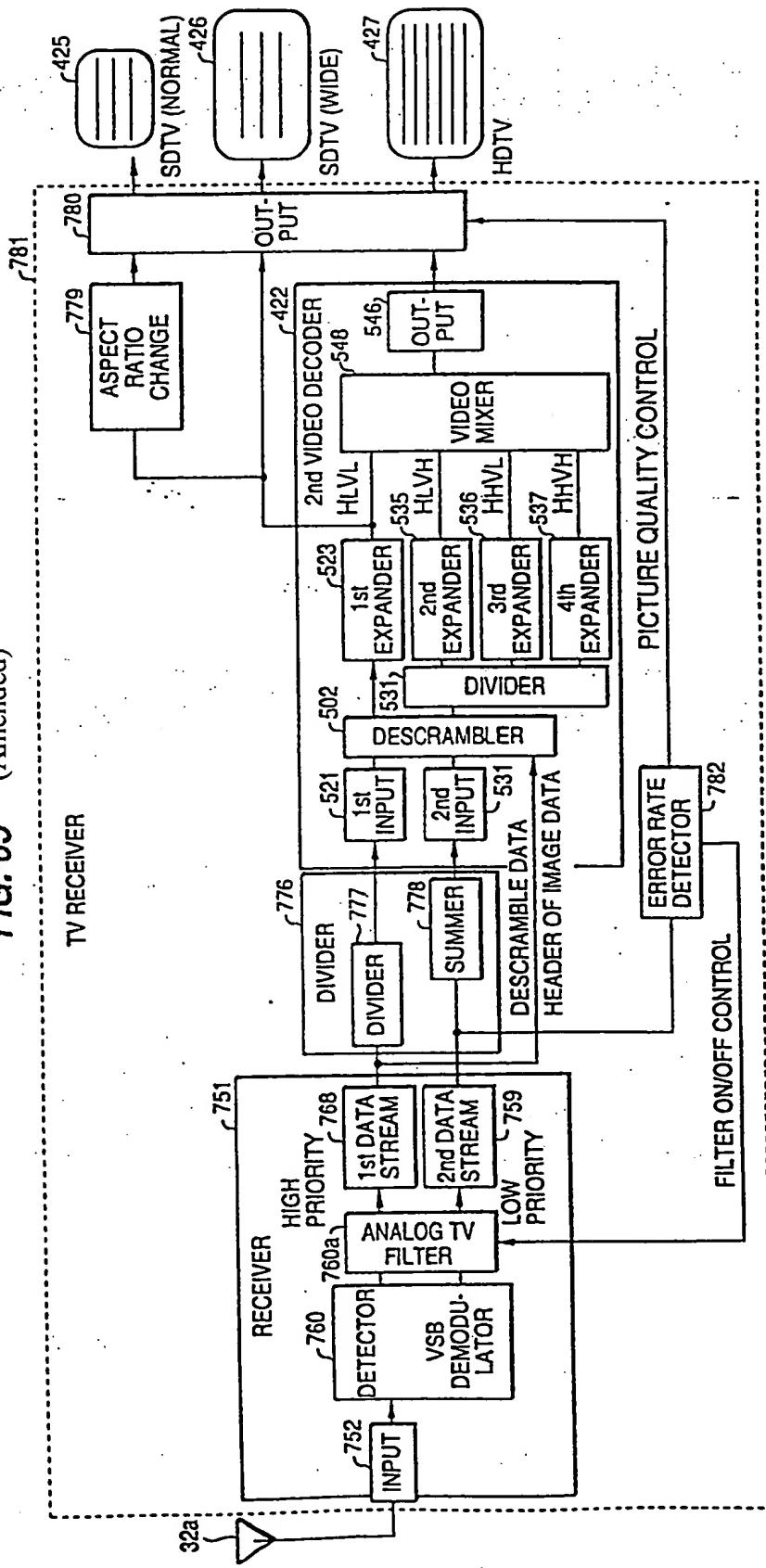


FIG. 66

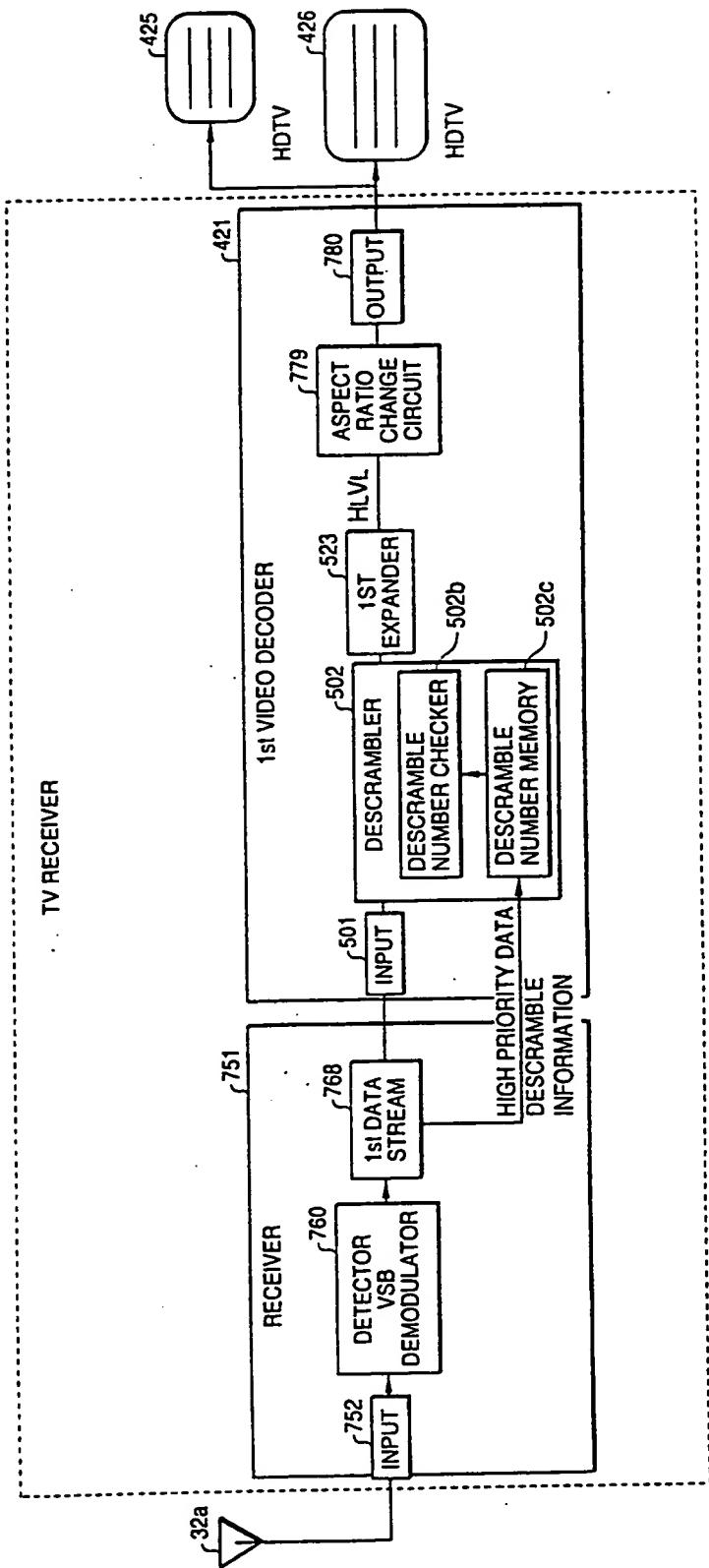
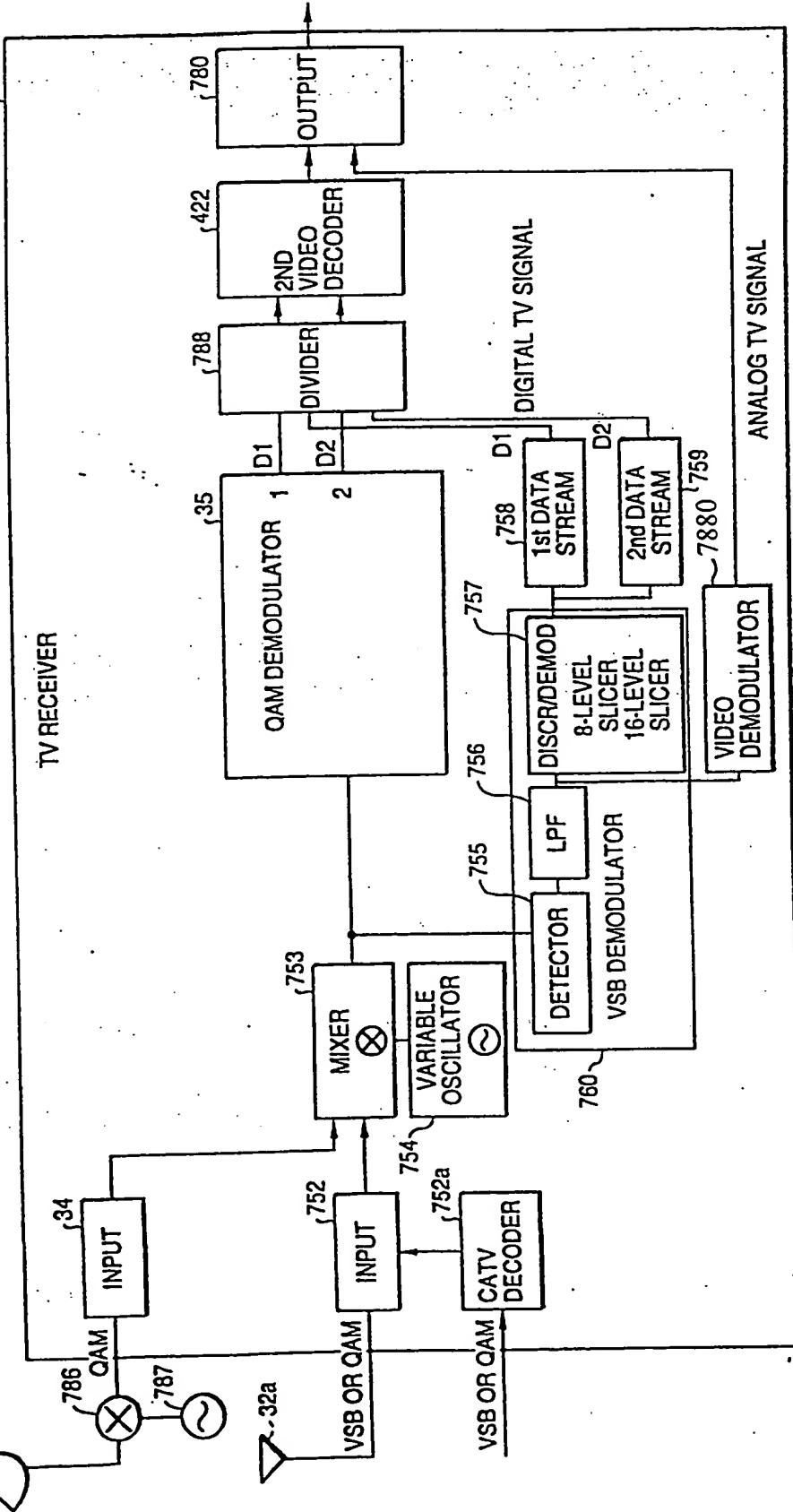


FIG. 67 (Amended)

(781)



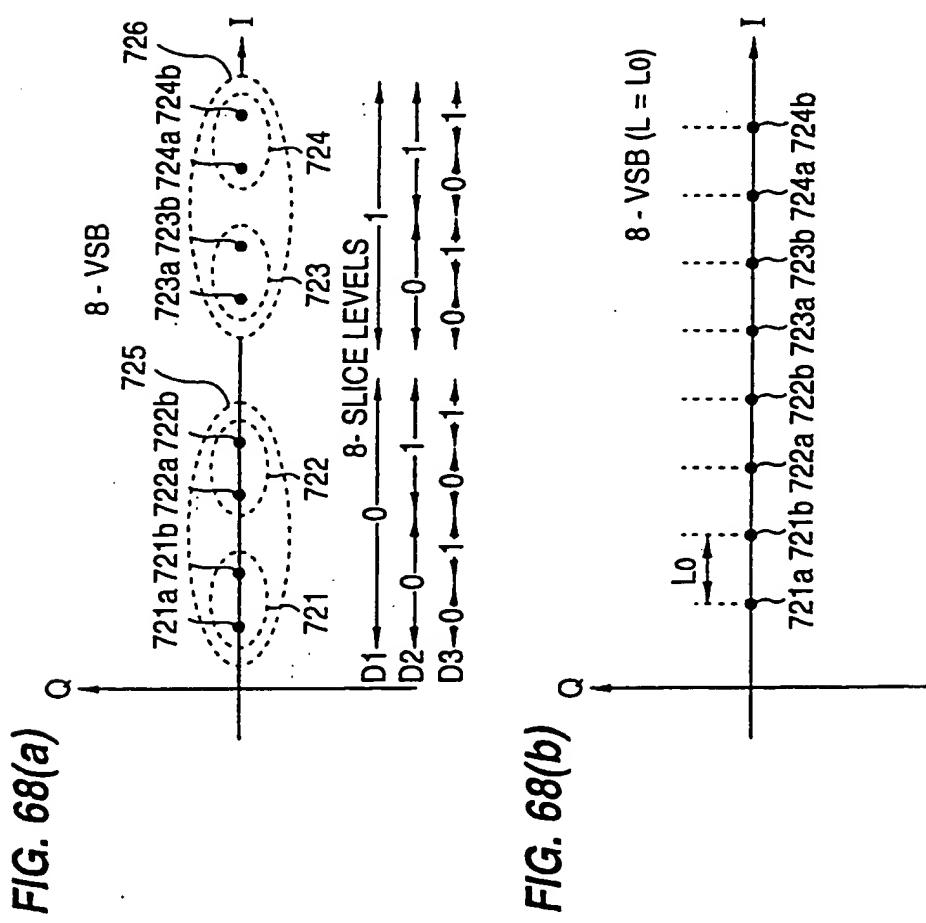


FIG. 69

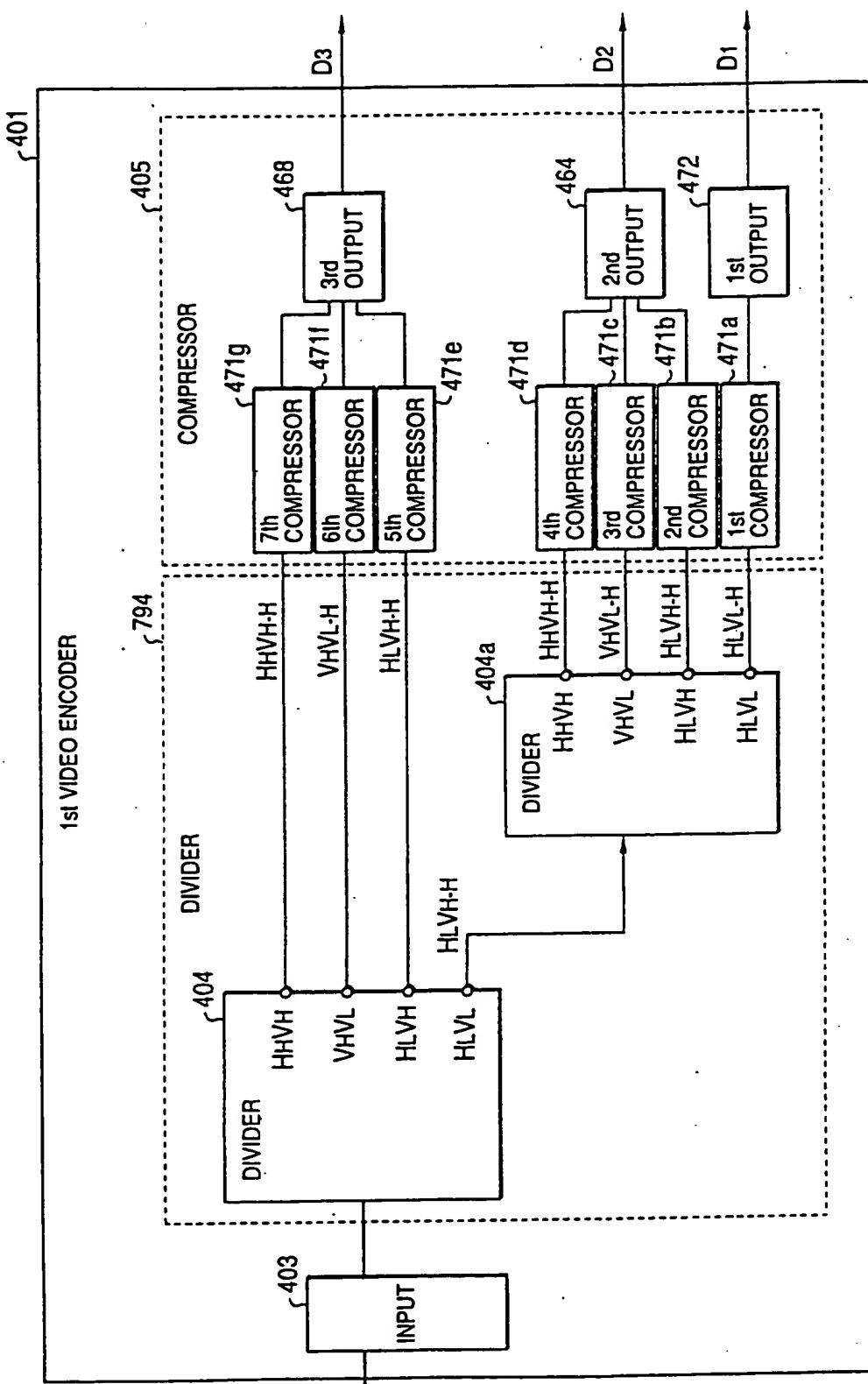


FIG. 70

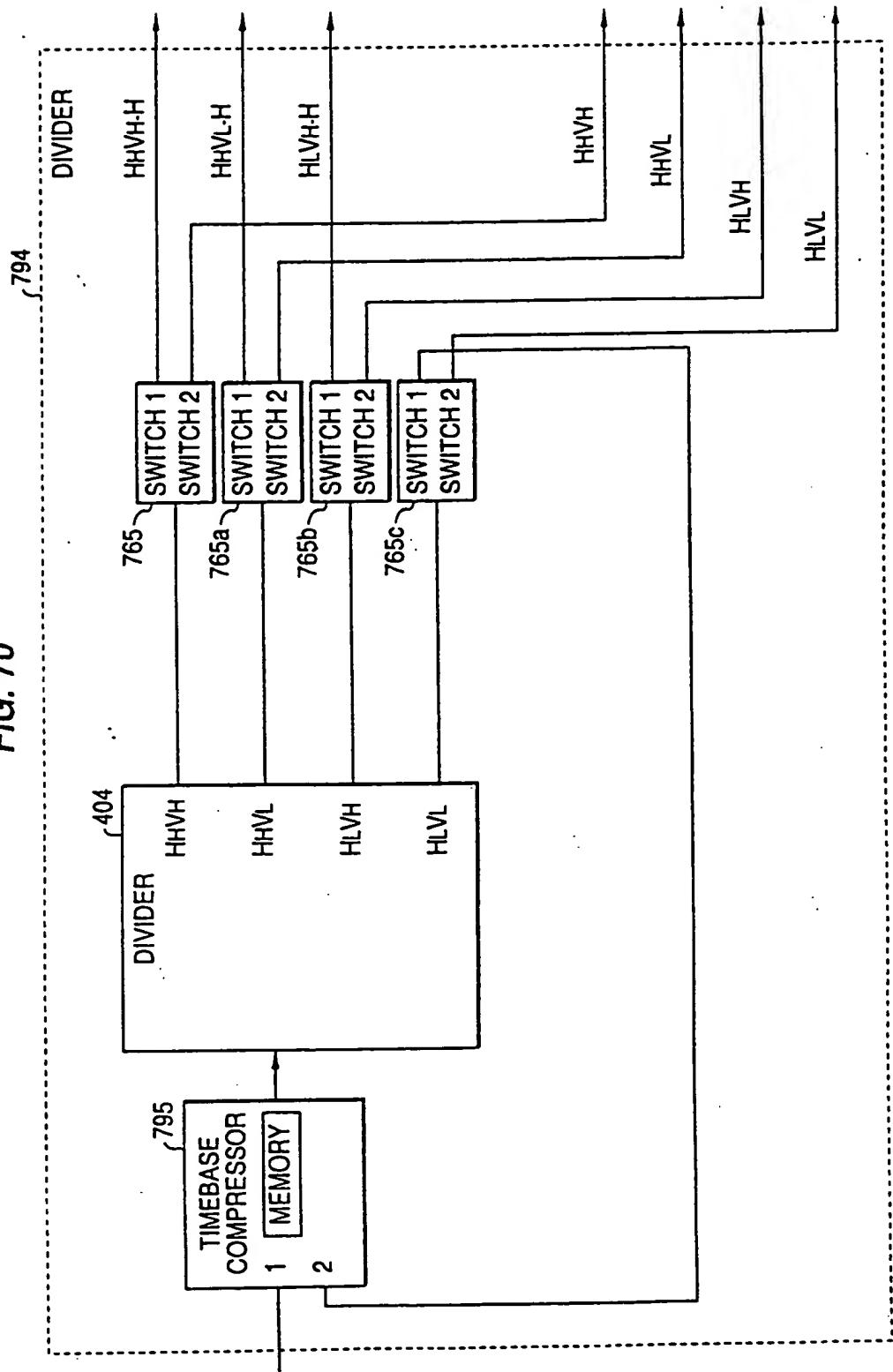


FIG. 71

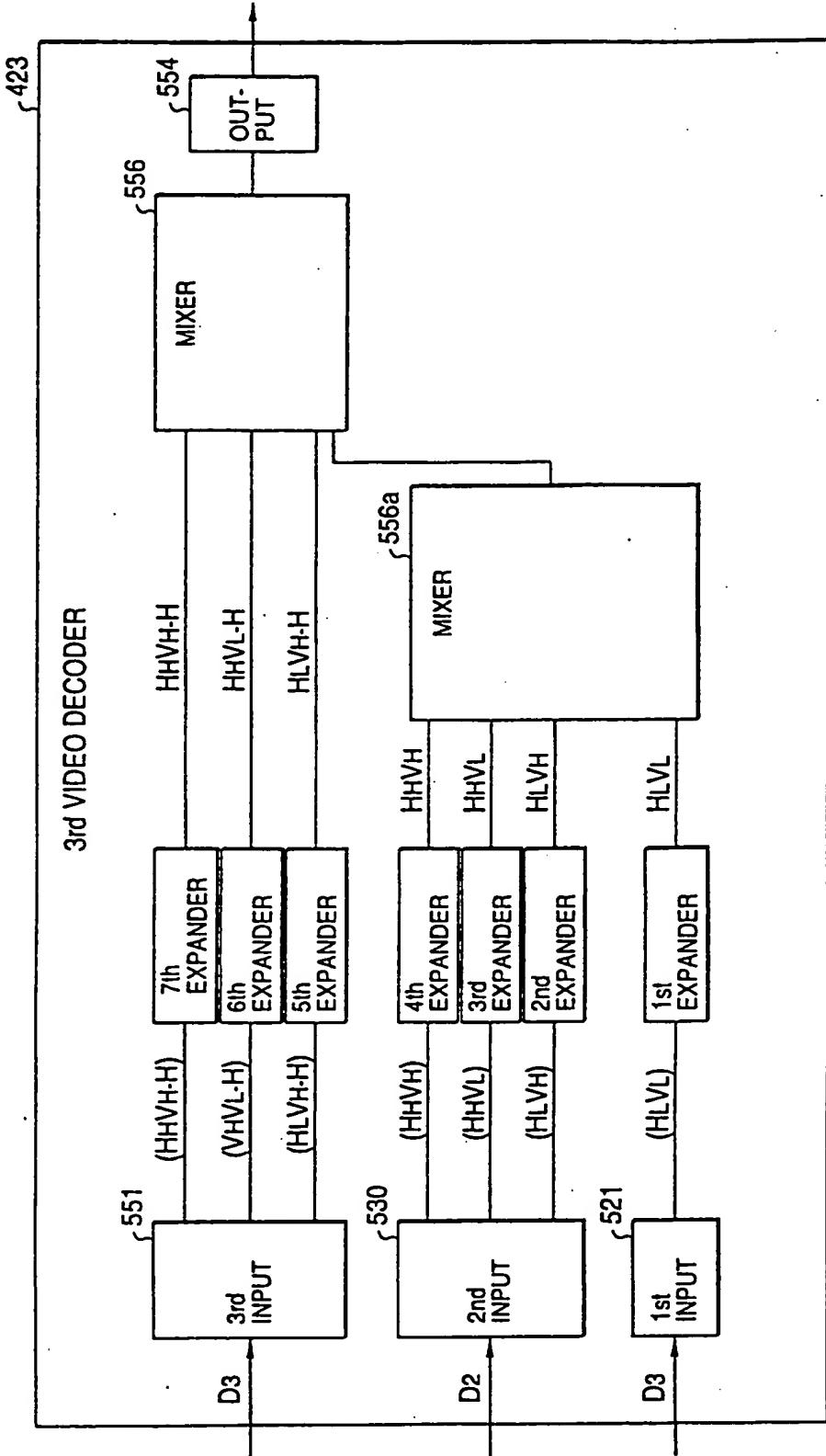


FIG. 72

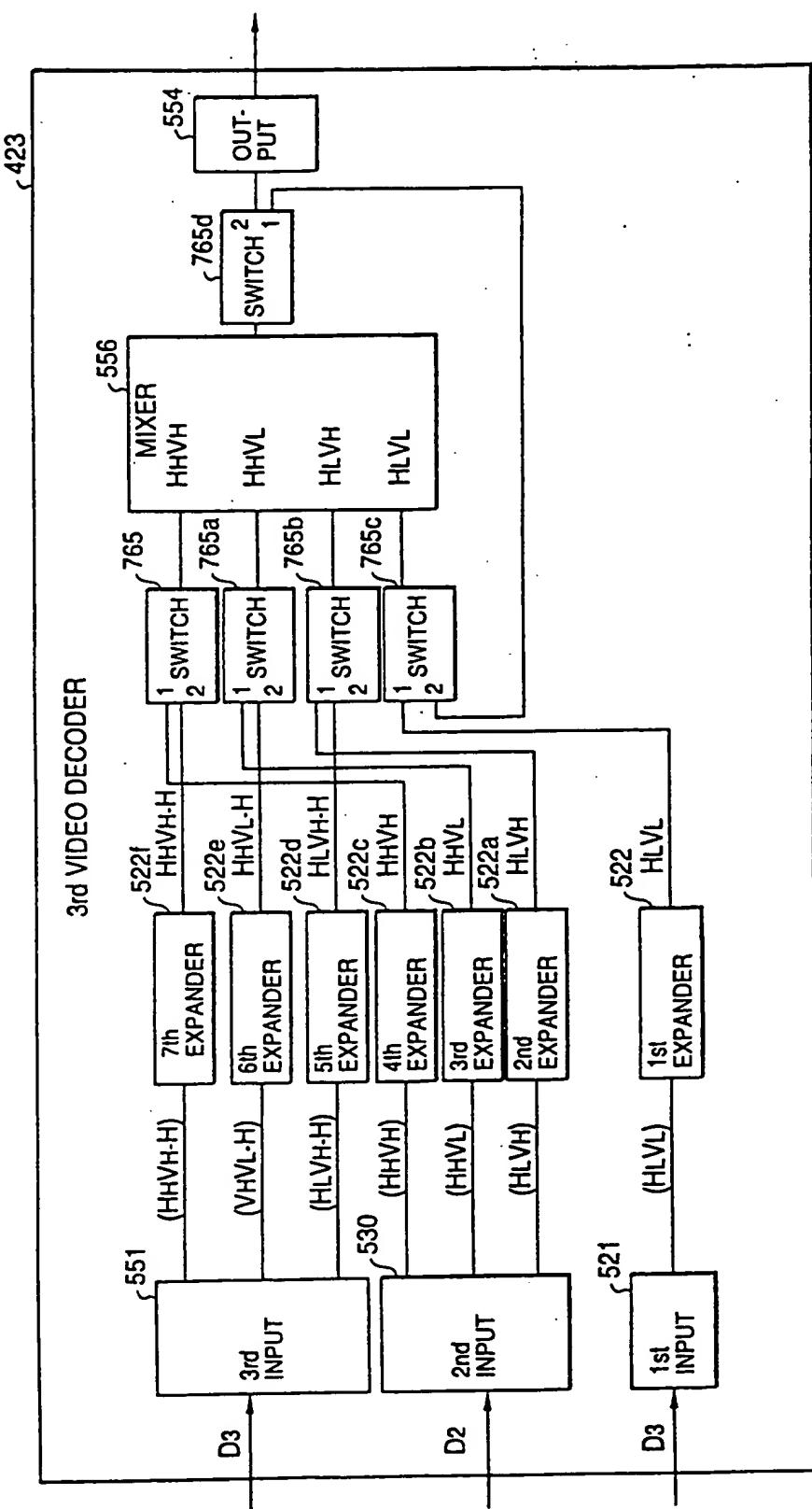


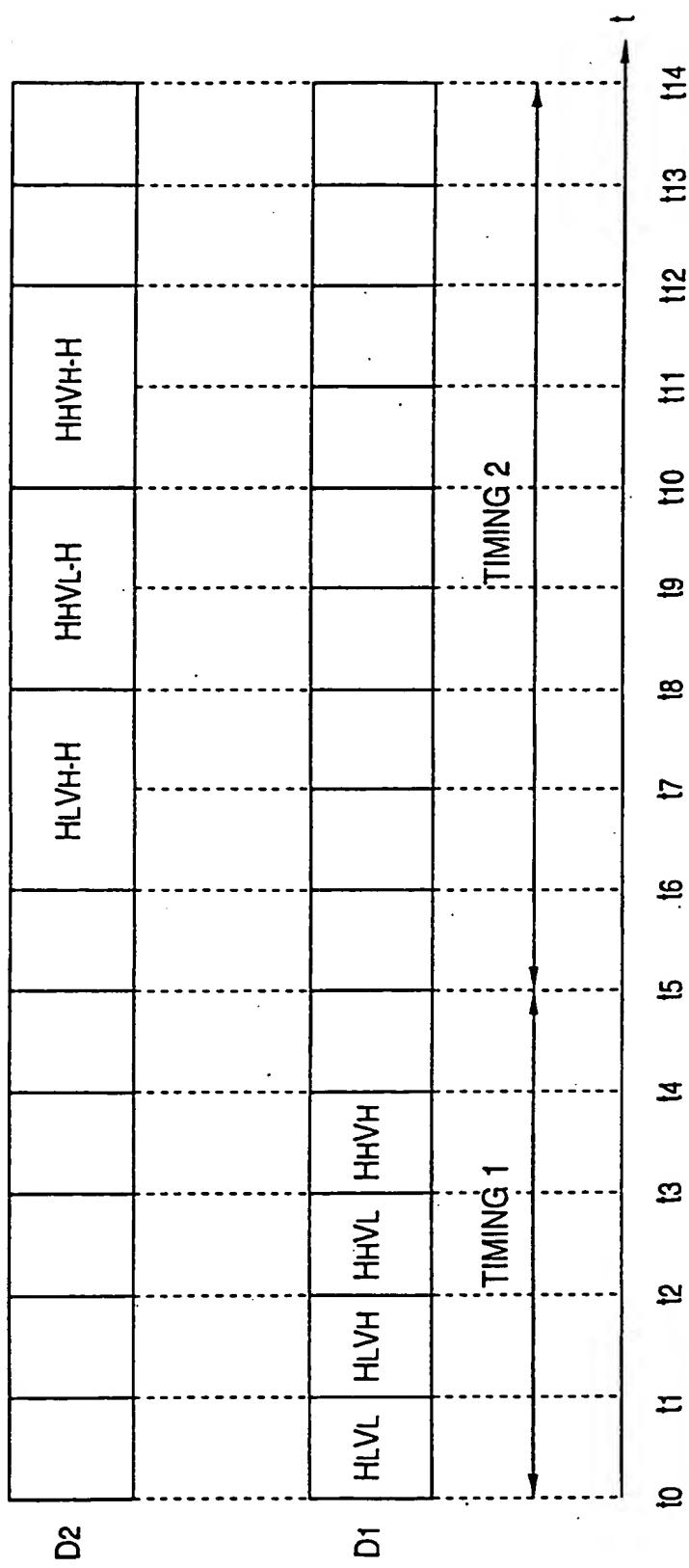
FIG. 73

FIG. 74(a)

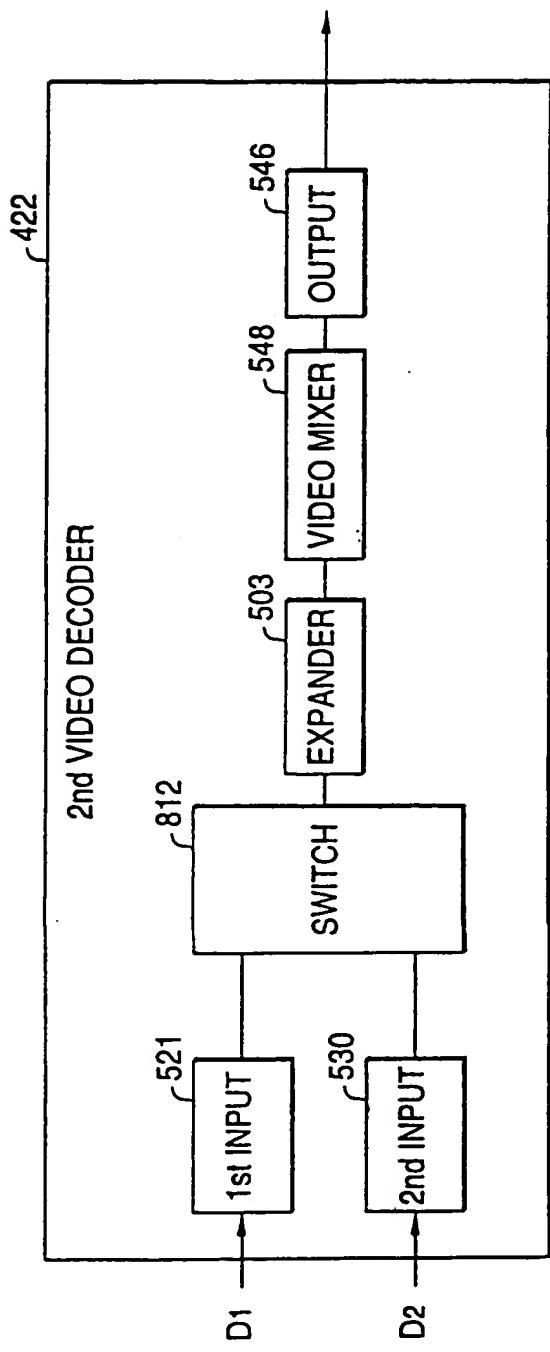


FIG. 74(b)

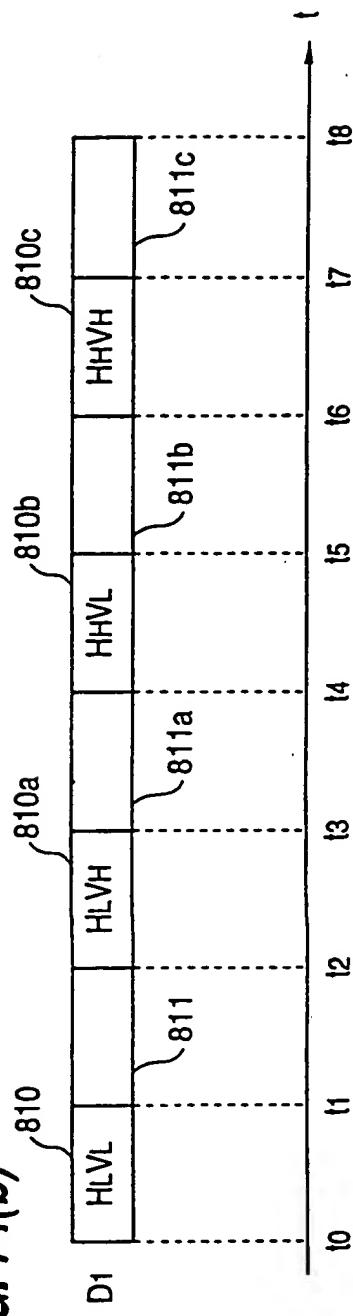


FIG. 75

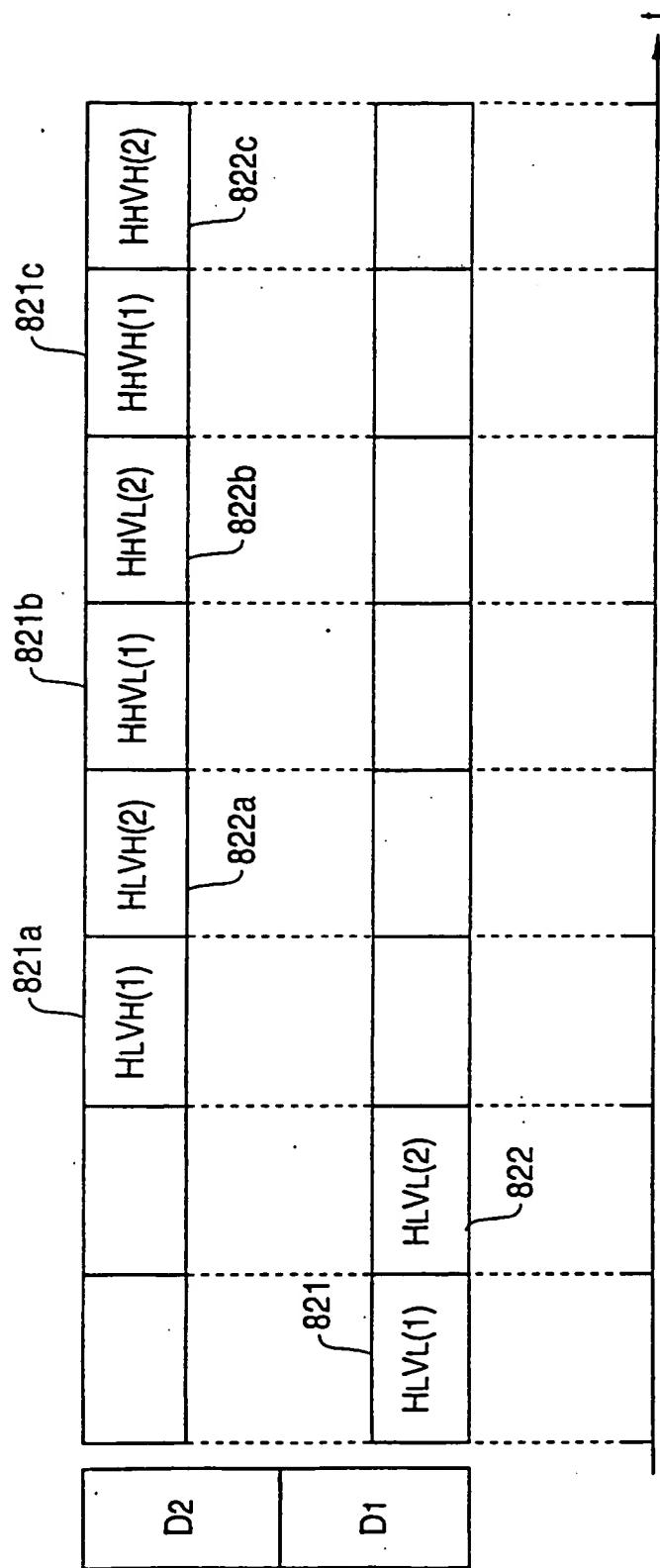


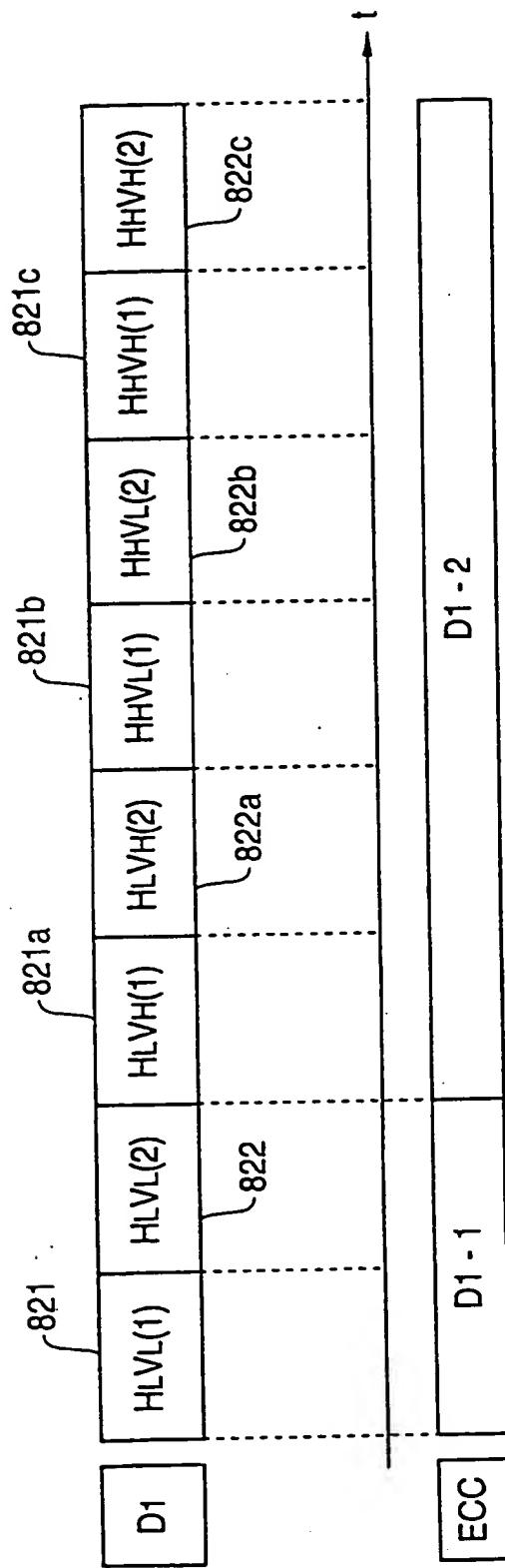
FIG. 76

FIG. 77

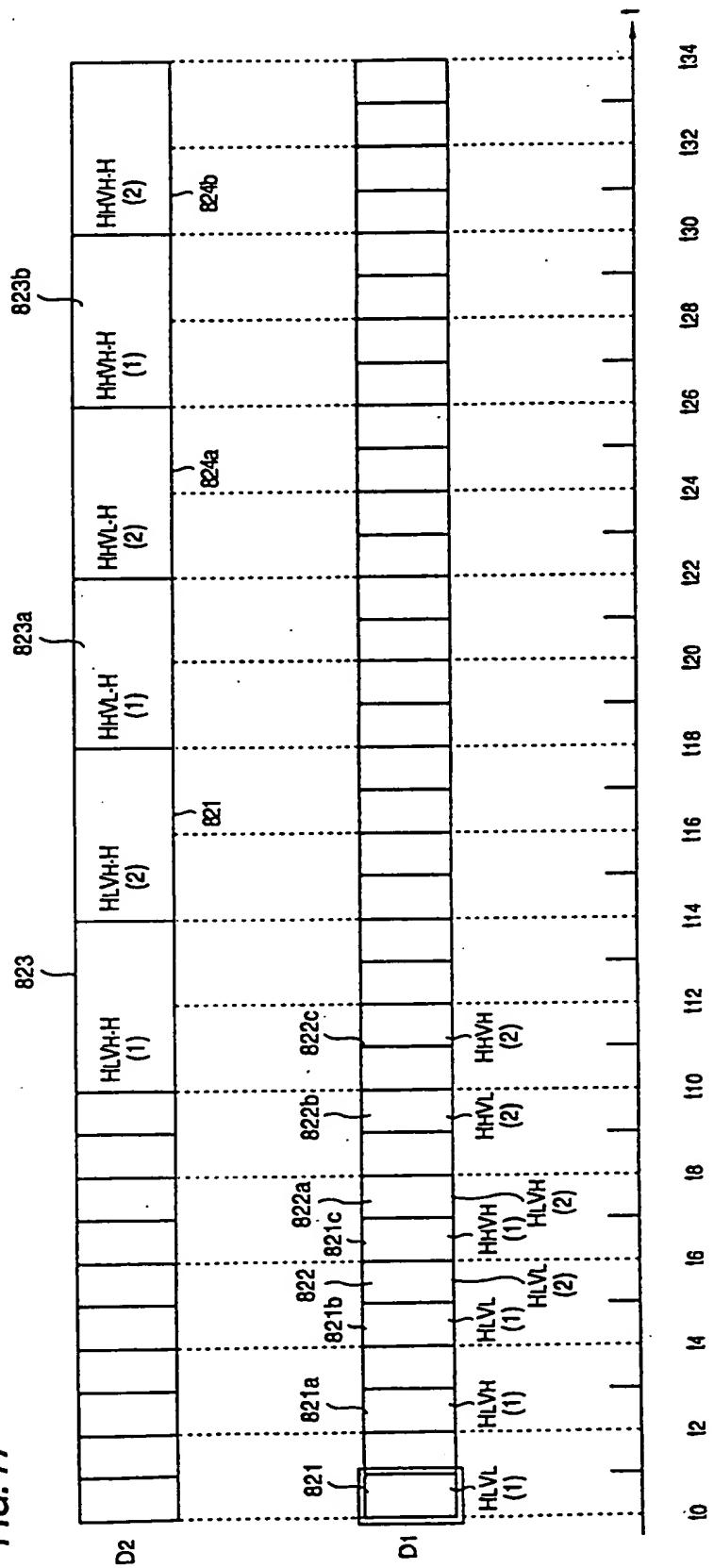


FIG. 78

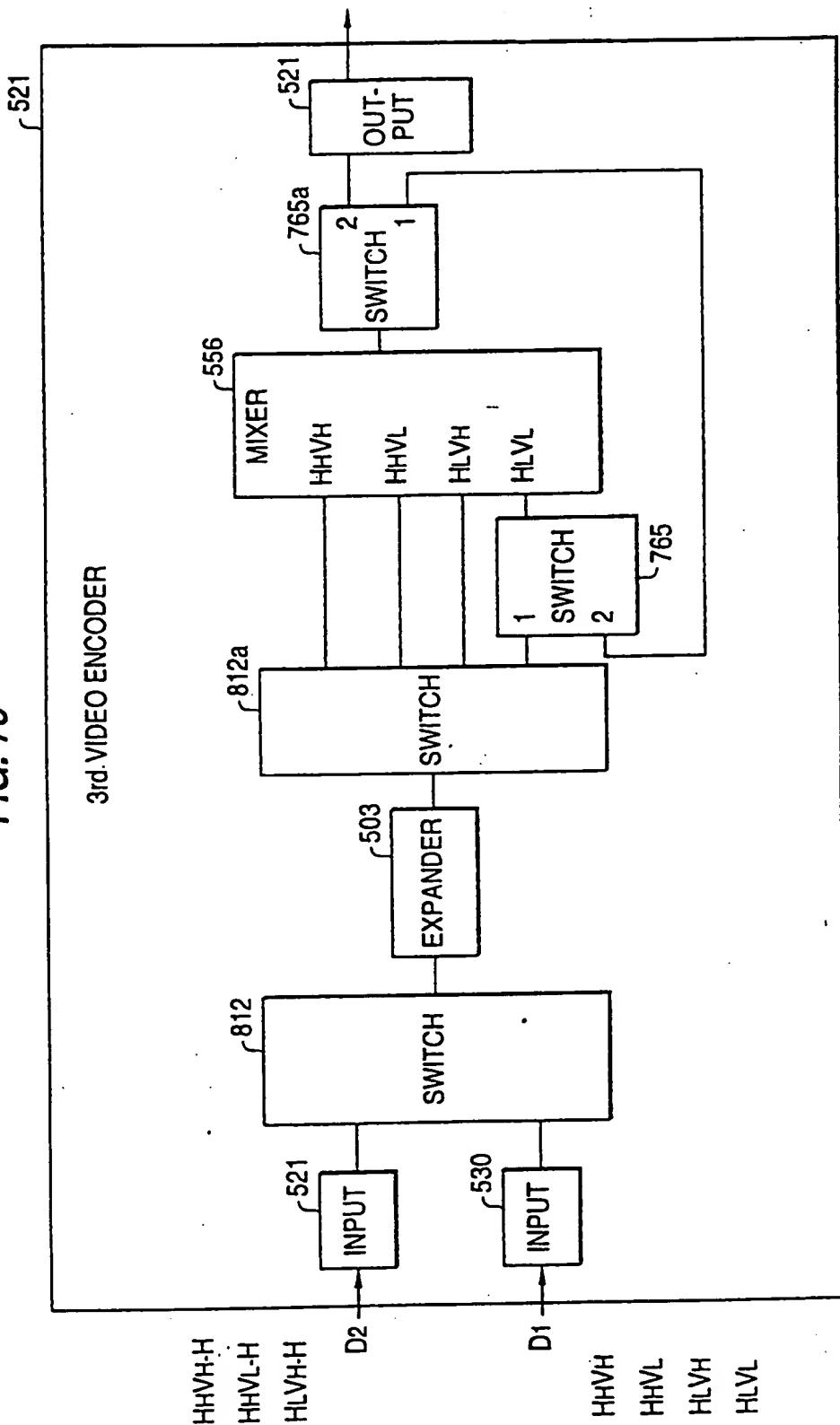
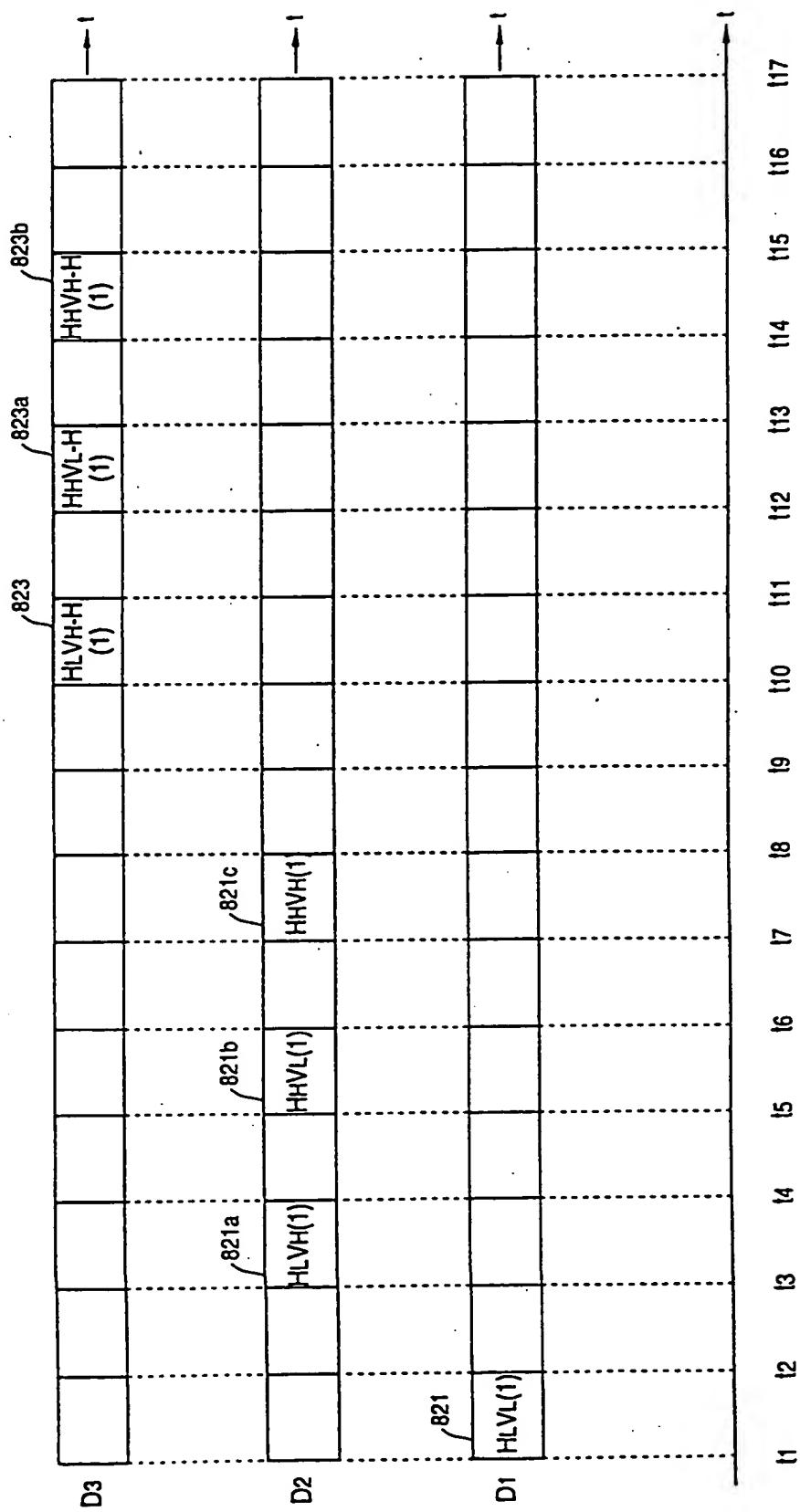


FIG. 79



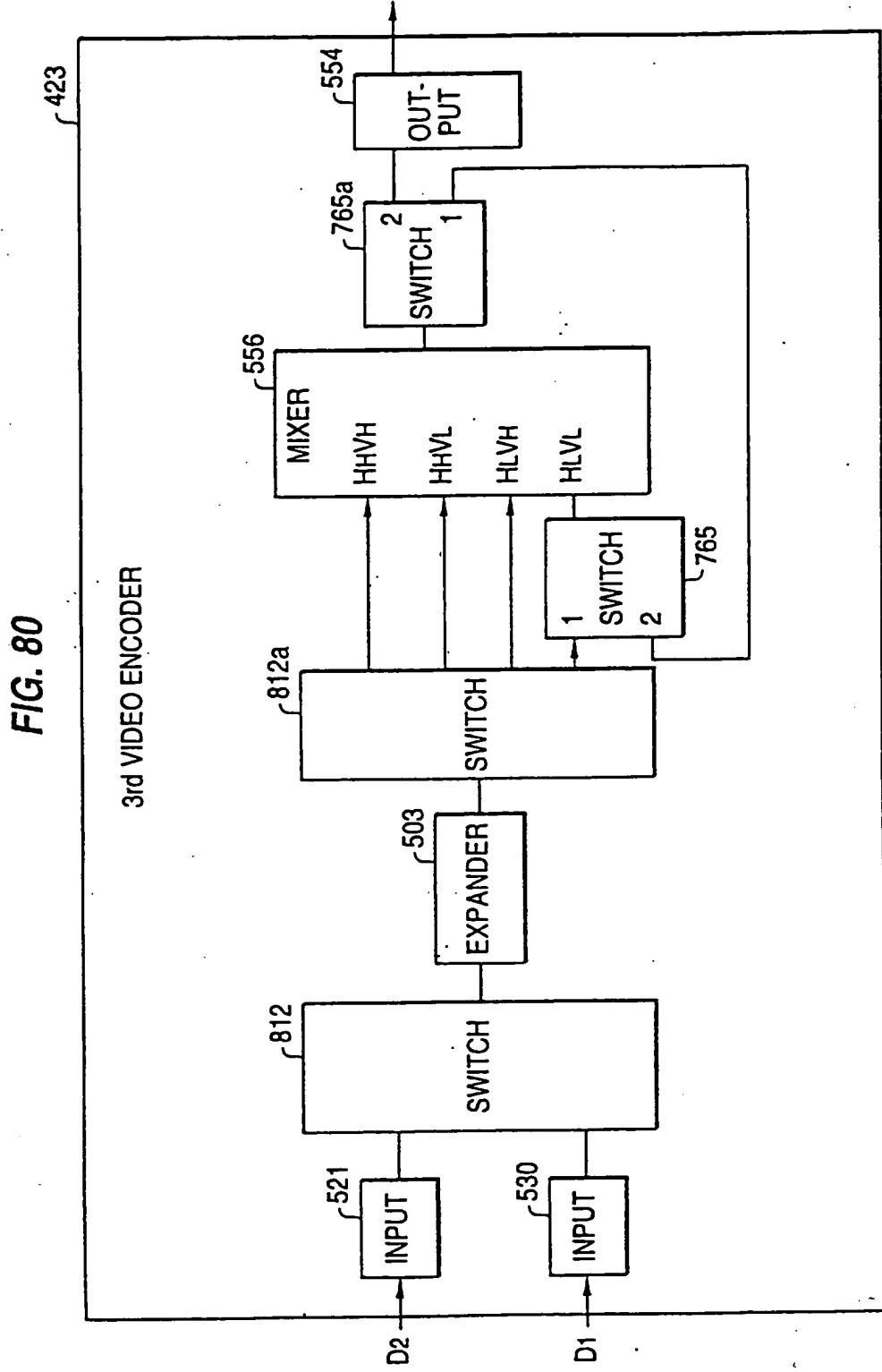


FIG. 81

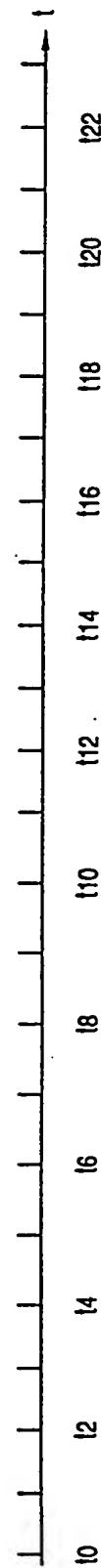
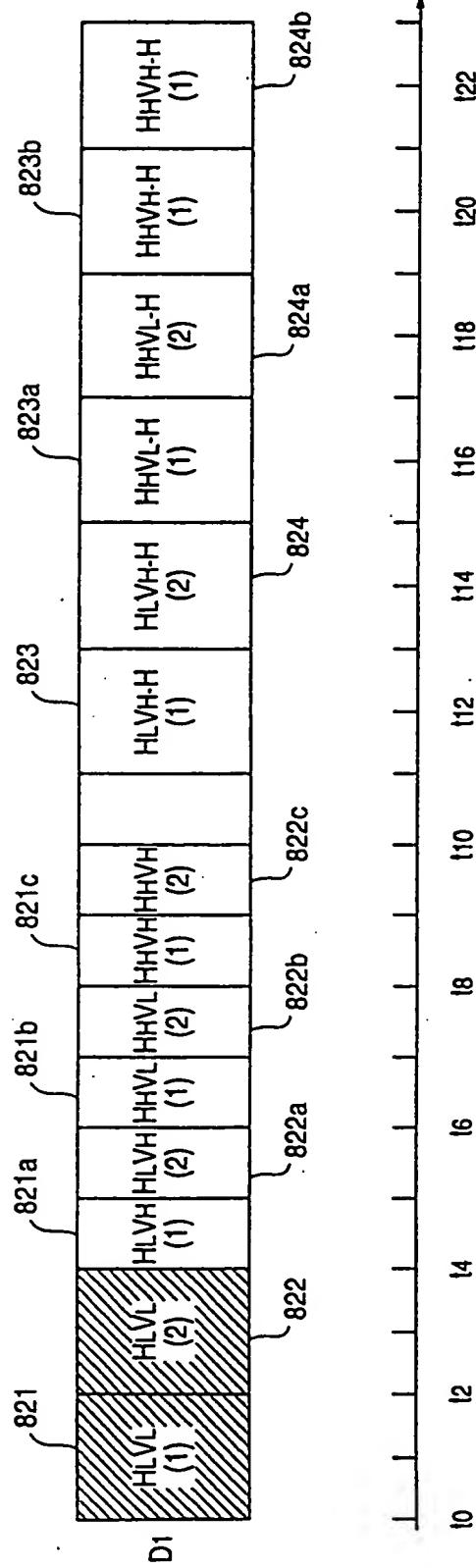


FIG. 82

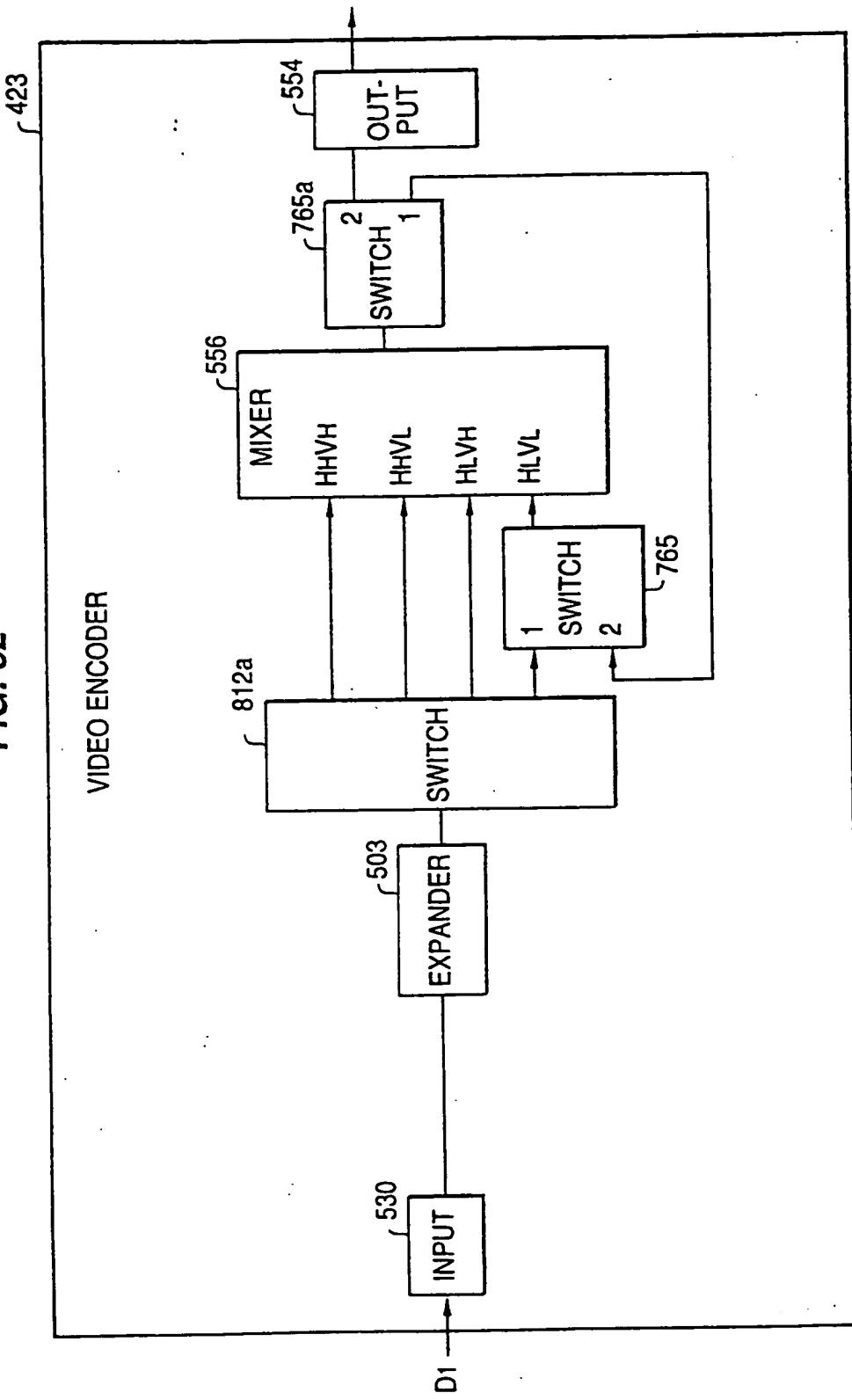


FIG. 83

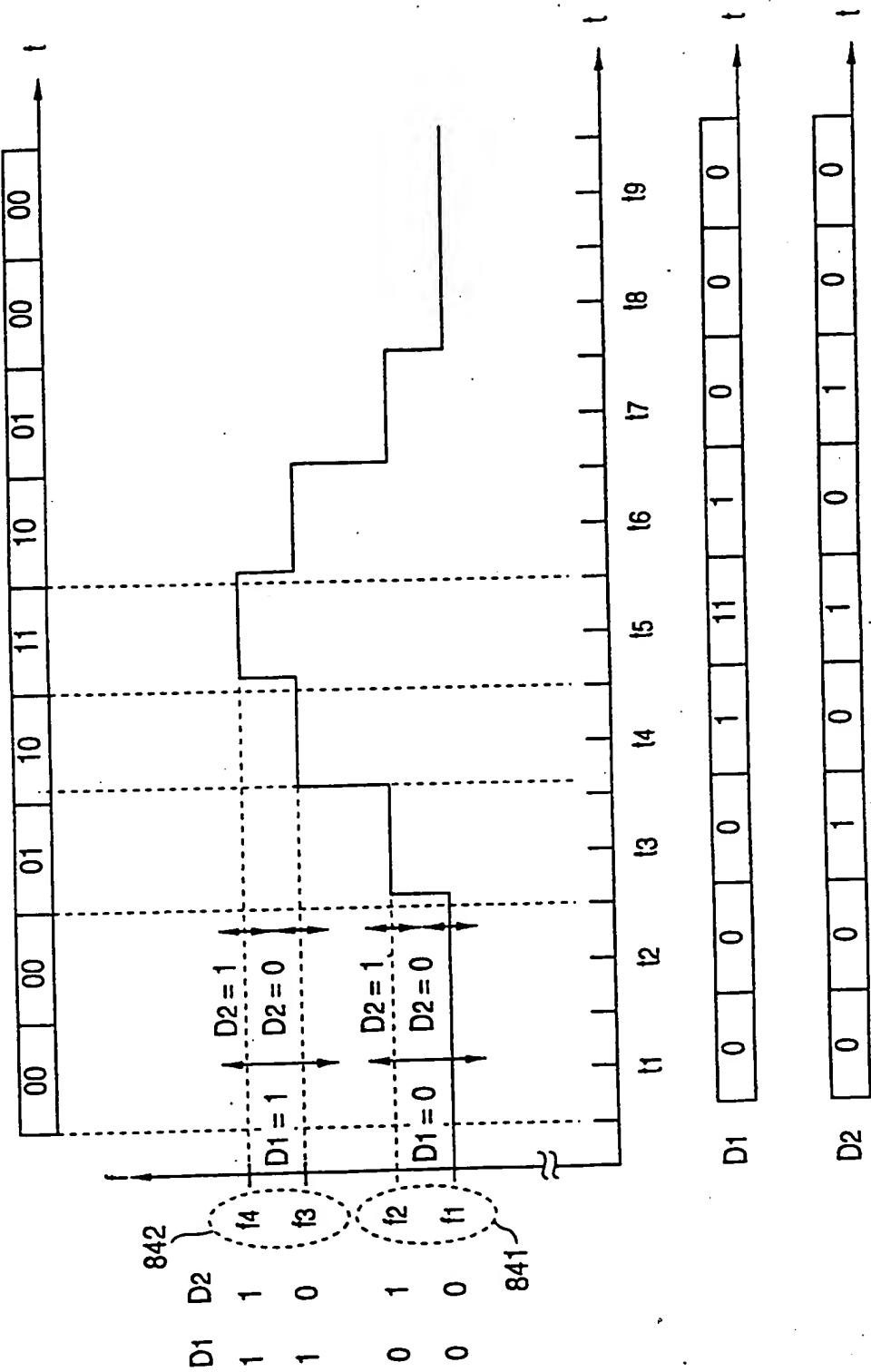


FIG. 84

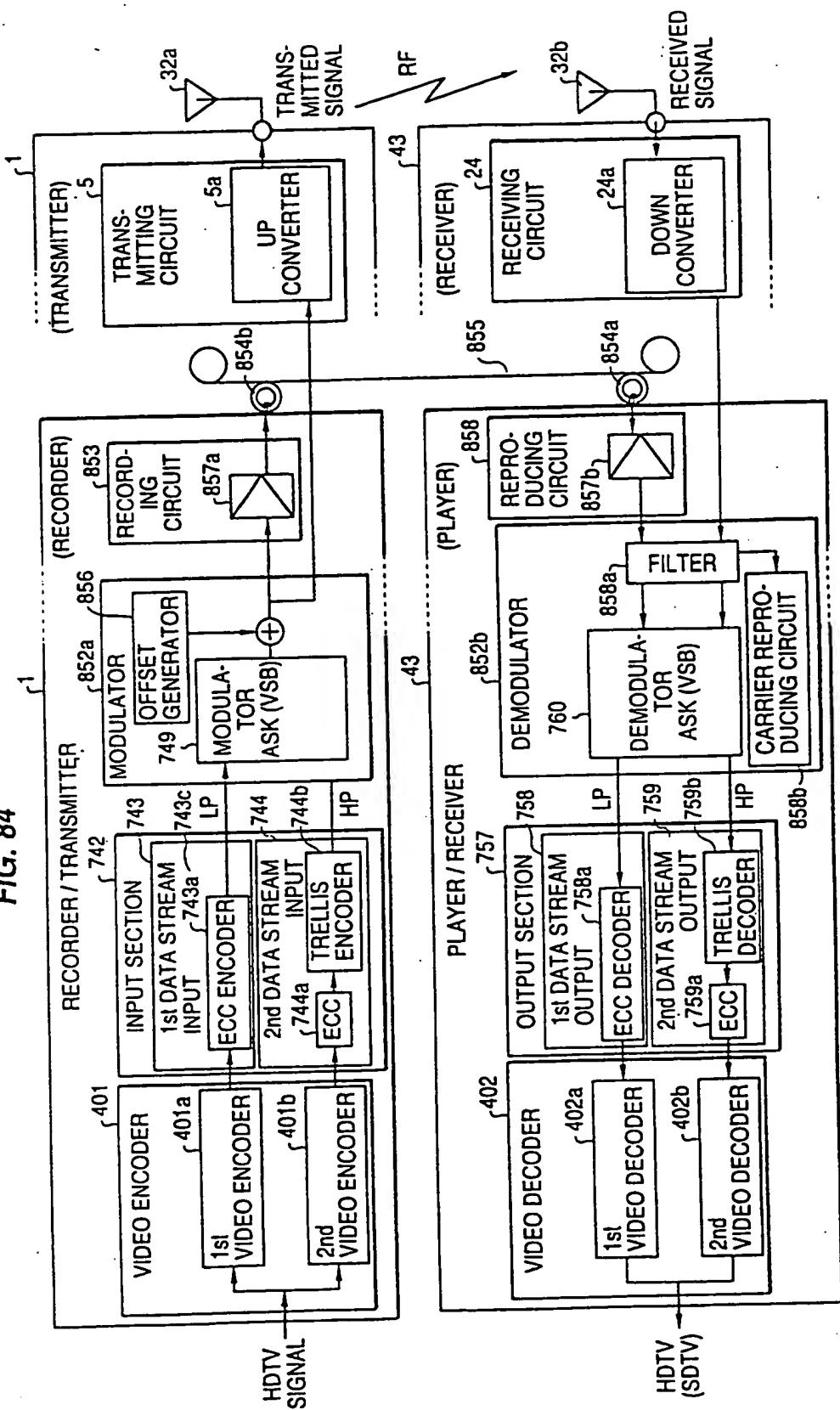


FIG. 85

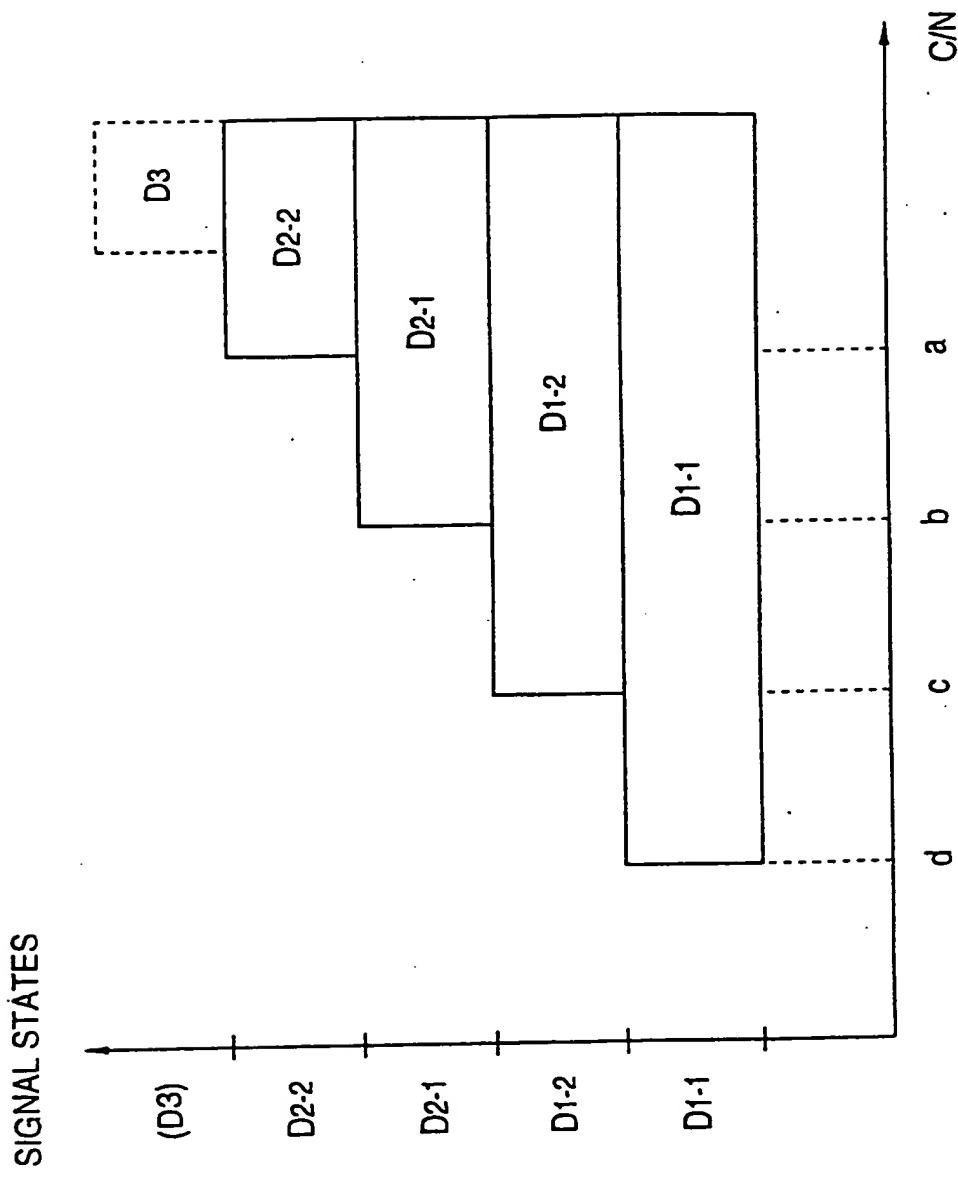
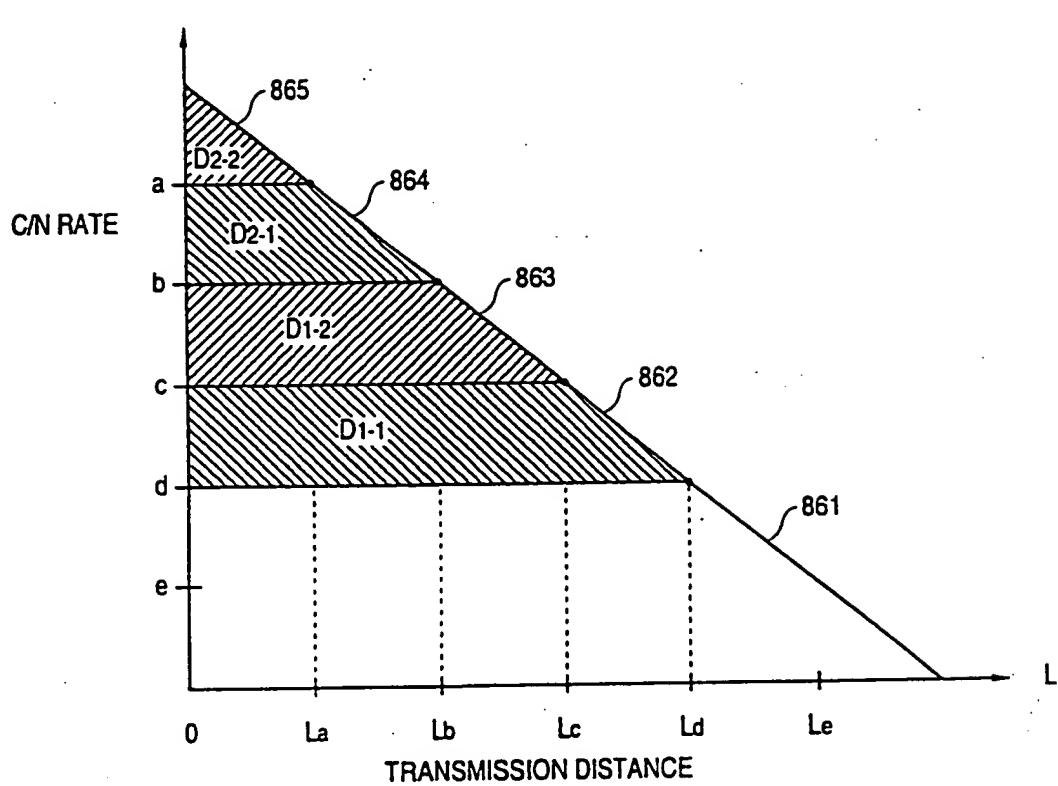


FIG. 86

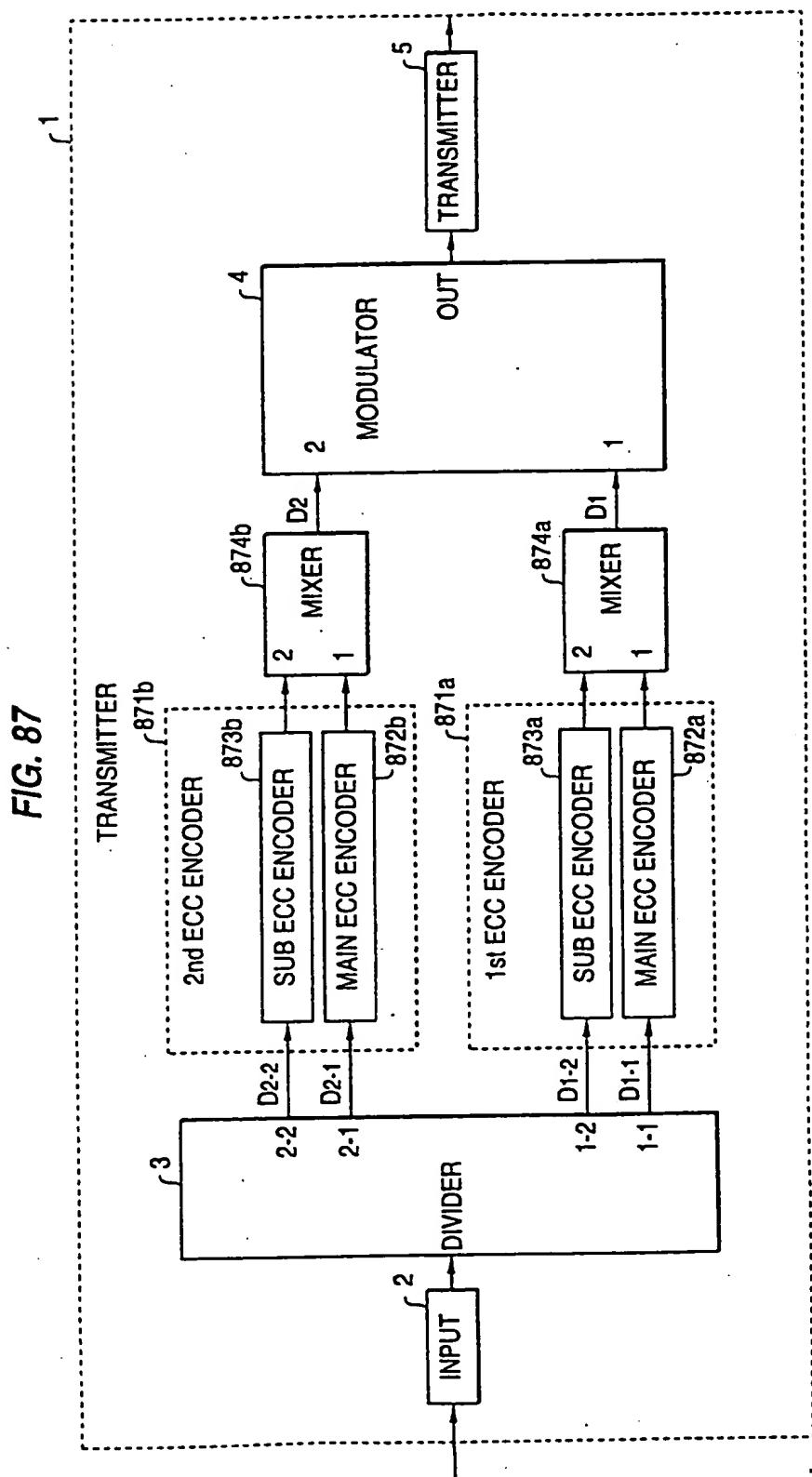


FIG. 88

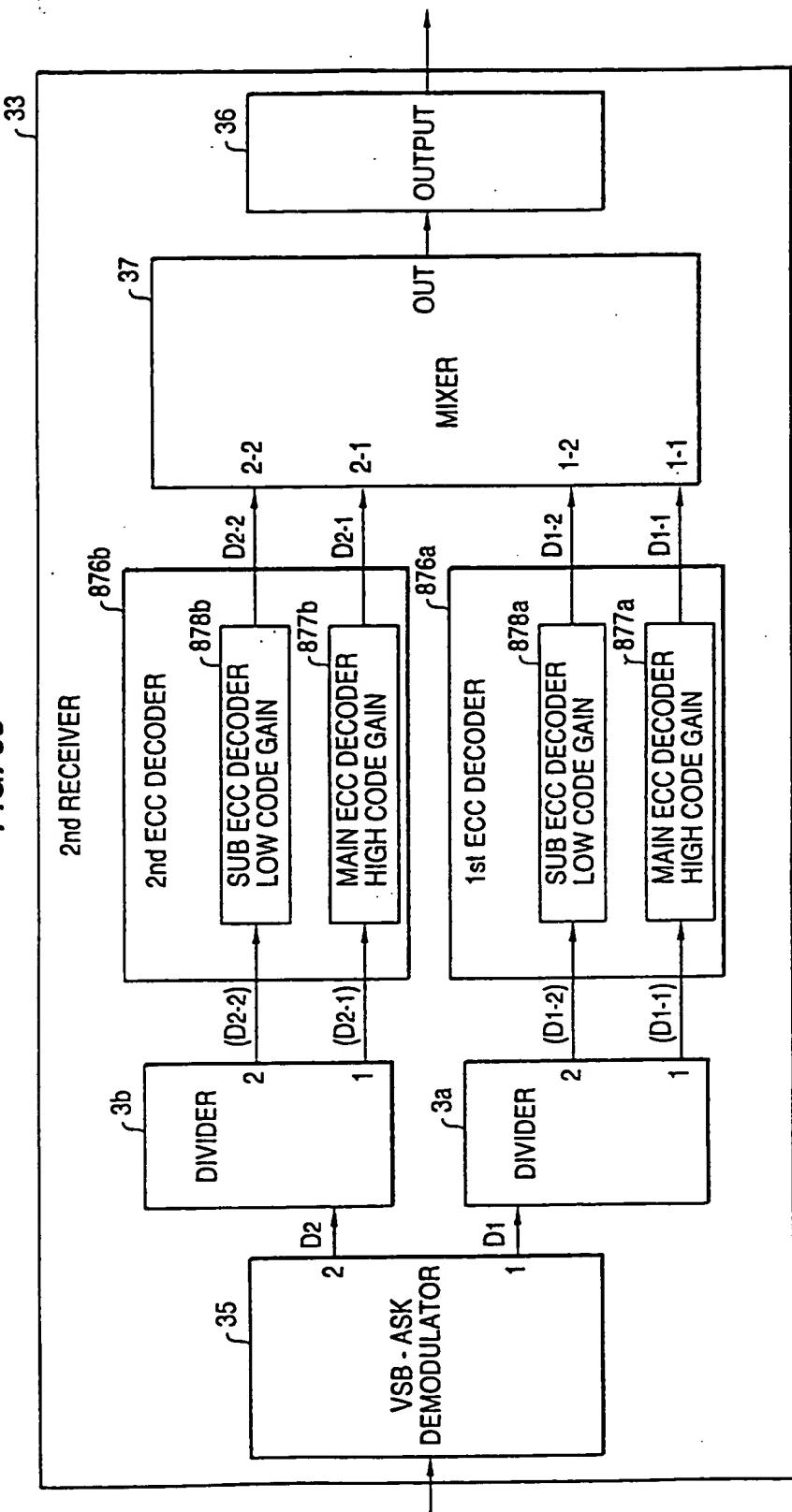
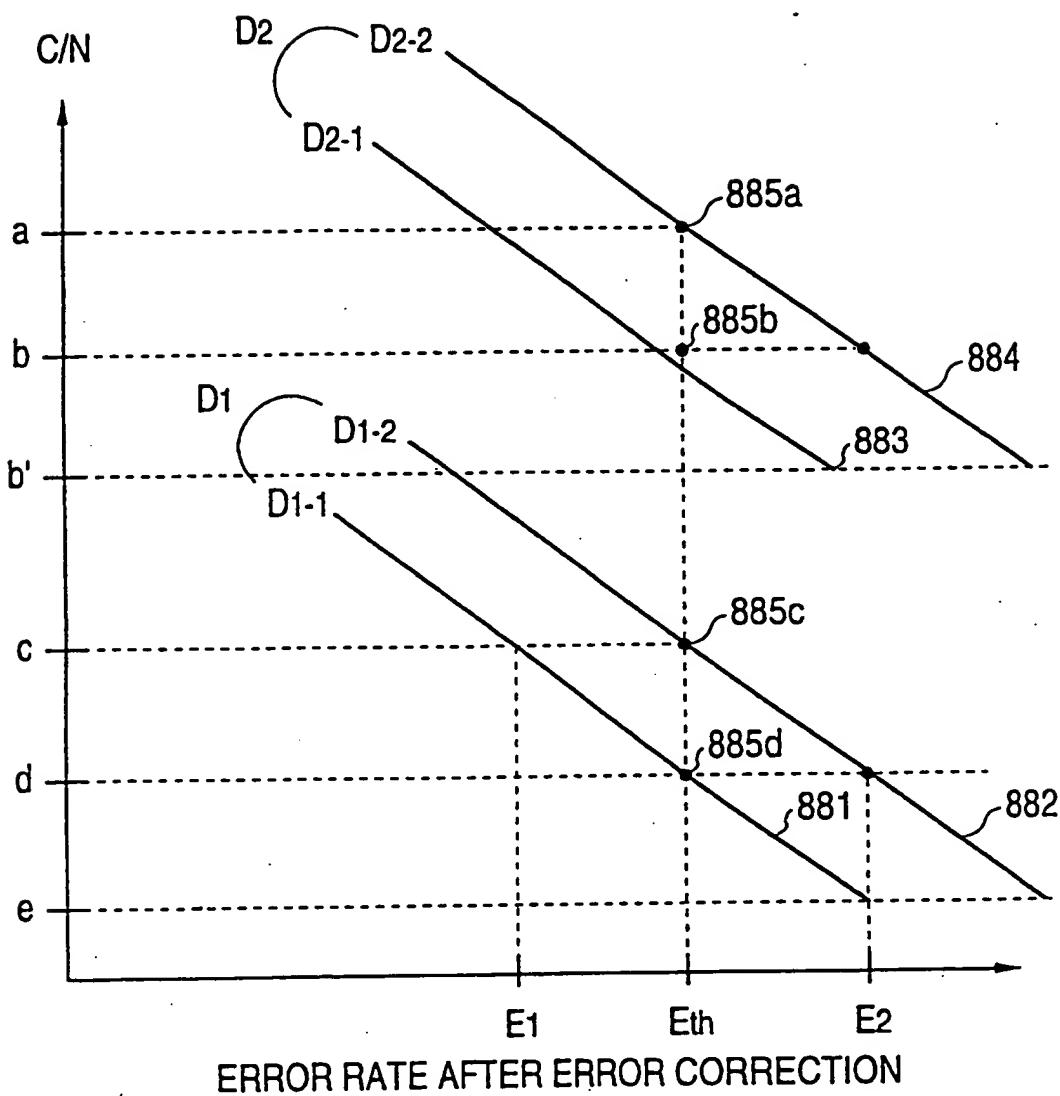


FIG. 89

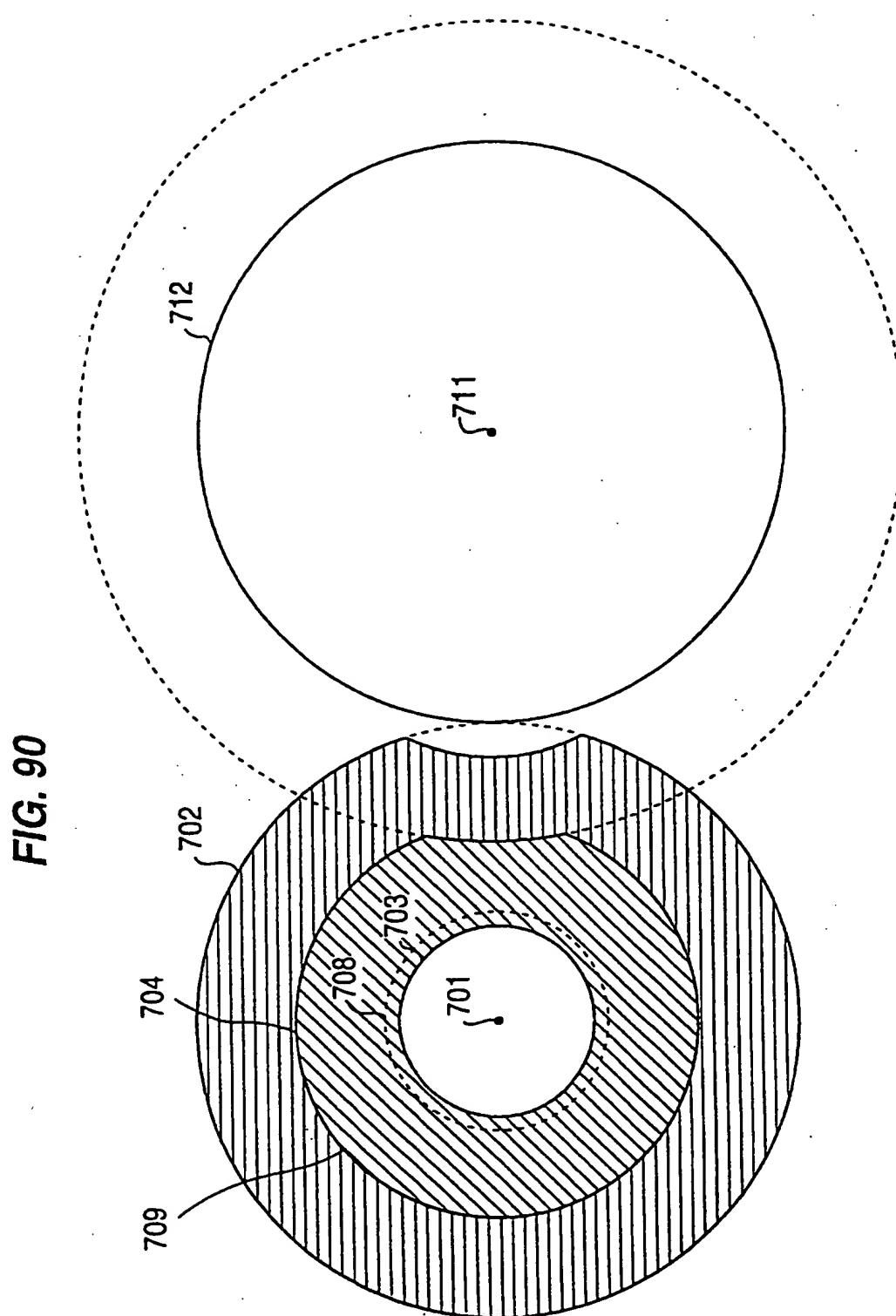


FIG. 91

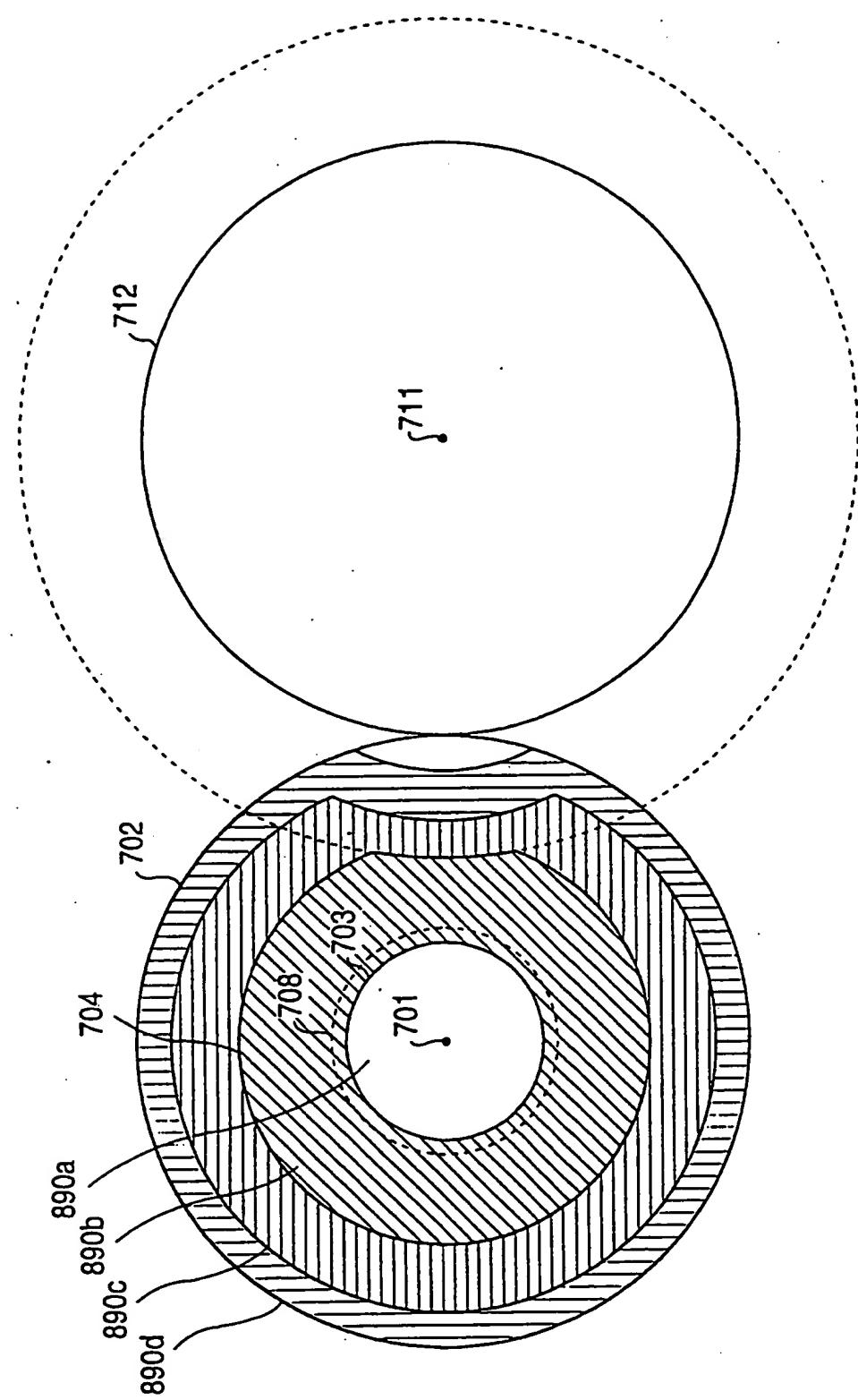


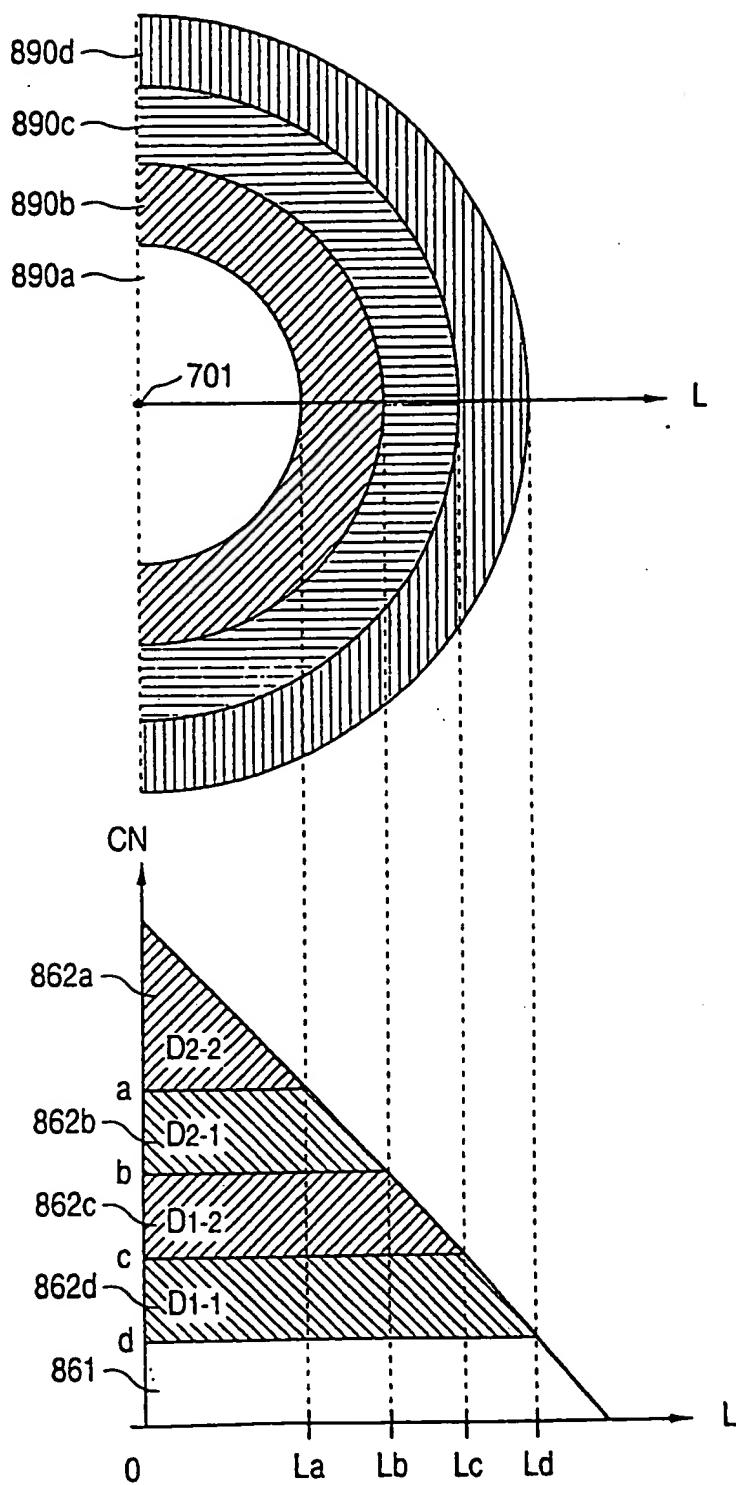
FIG. 92

FIG. 93 (Amended)

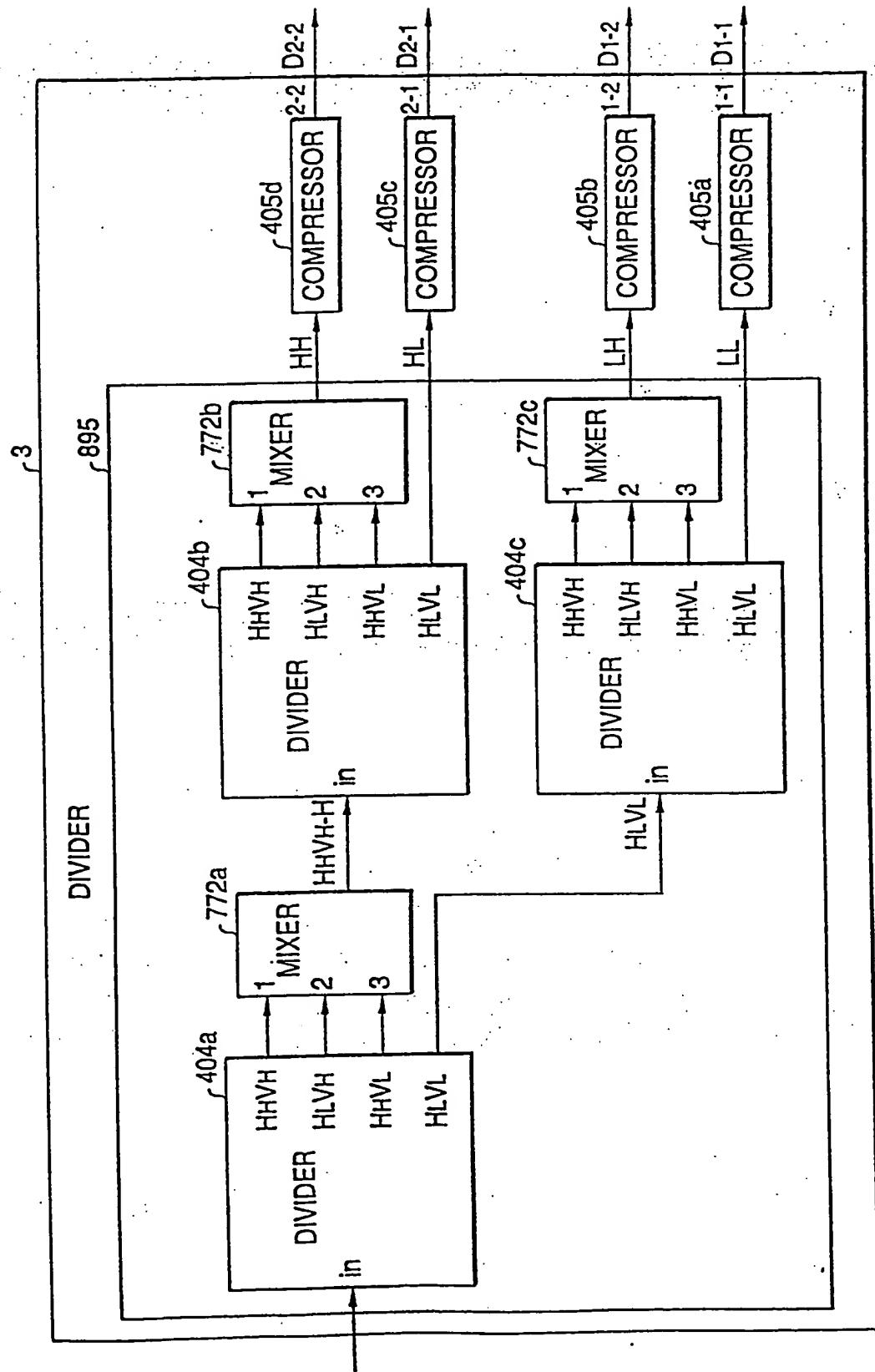


FIG. 94

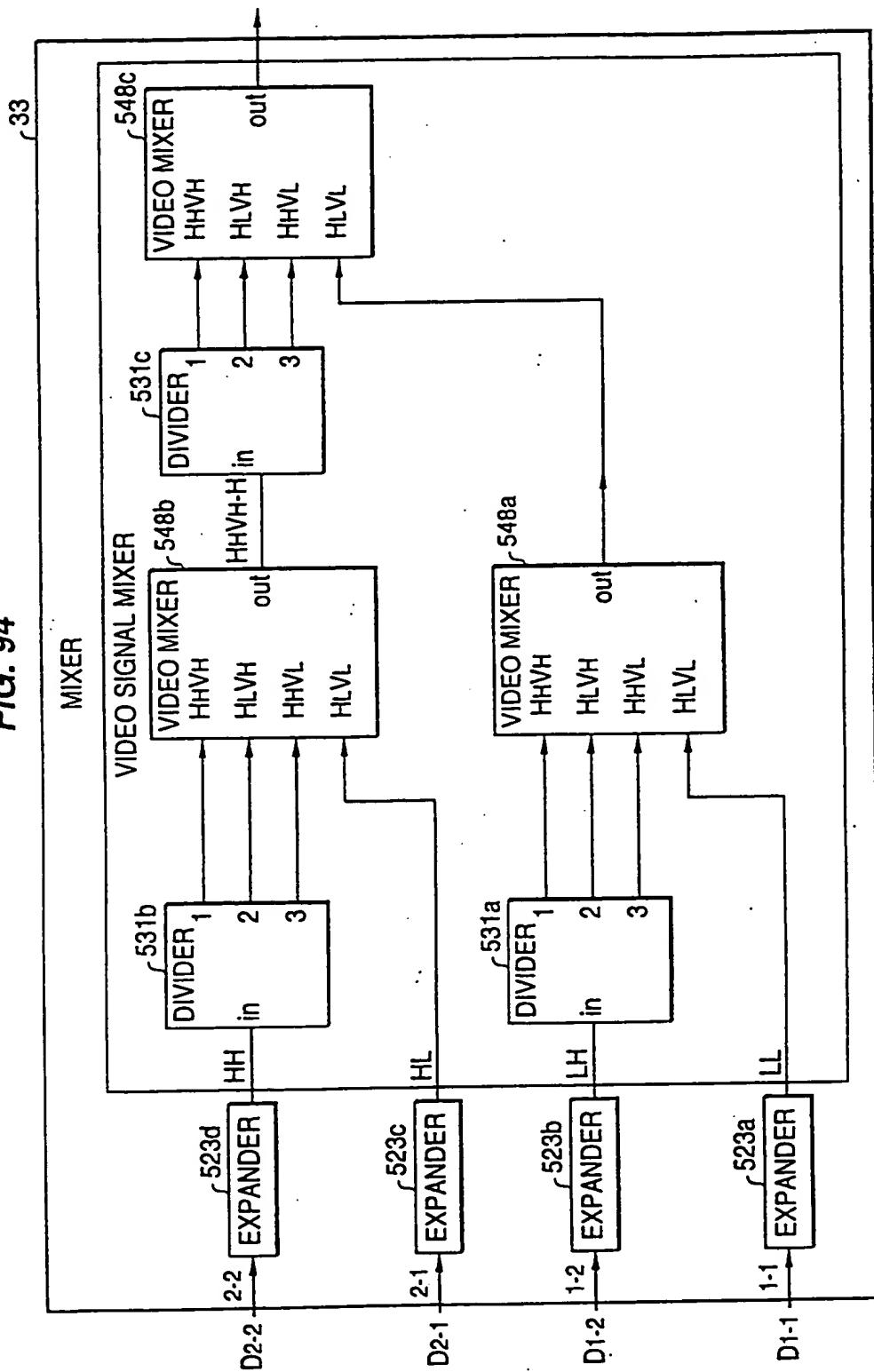


FIG. 95

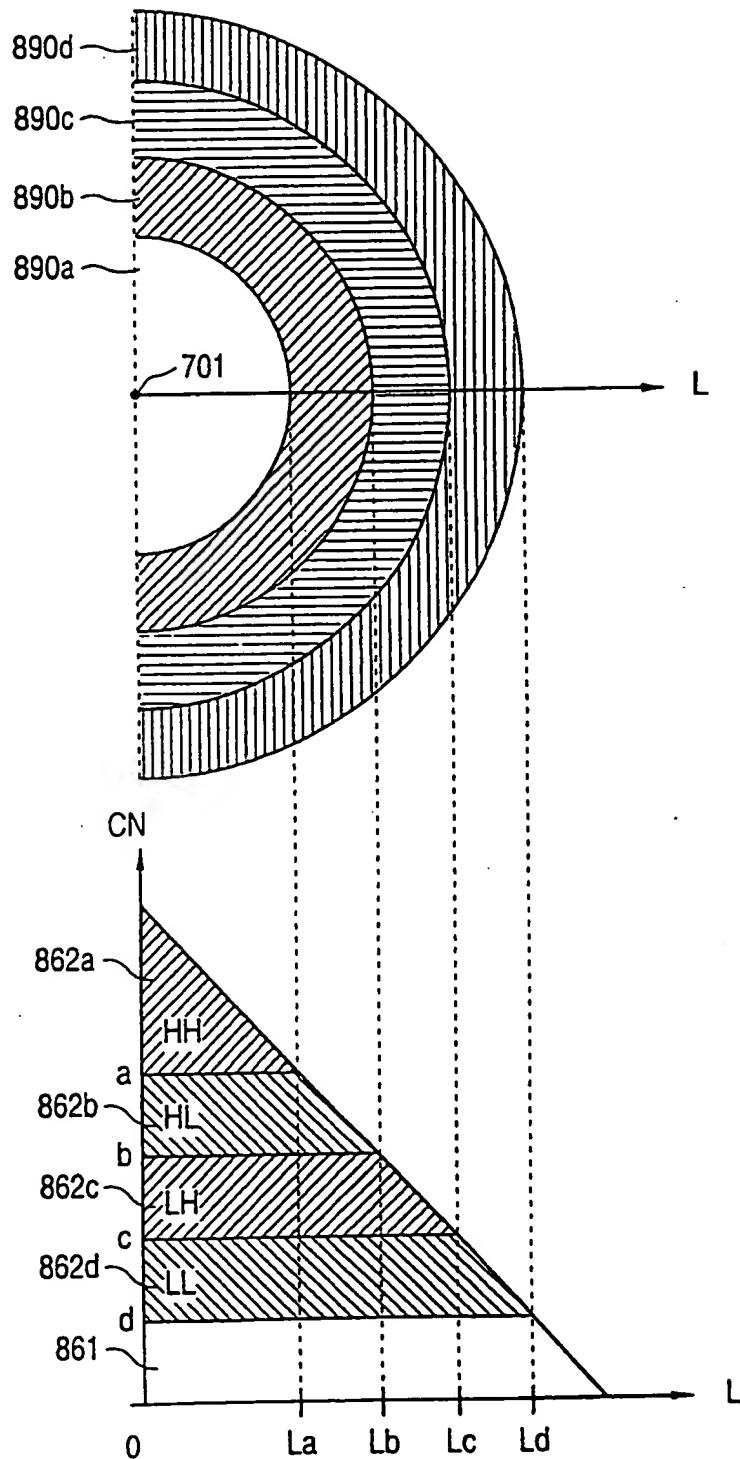


FIG. 96

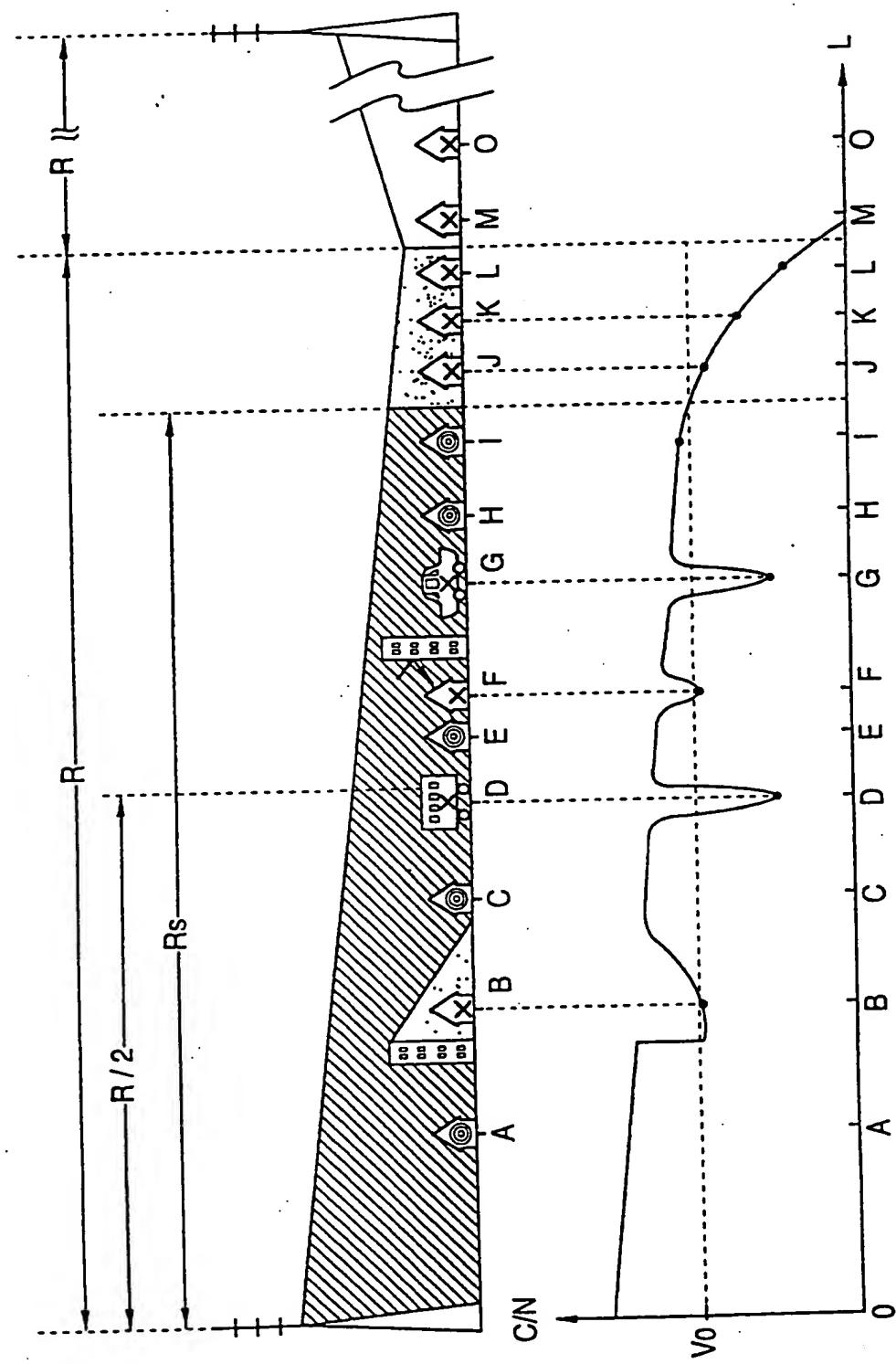


FIG. 97

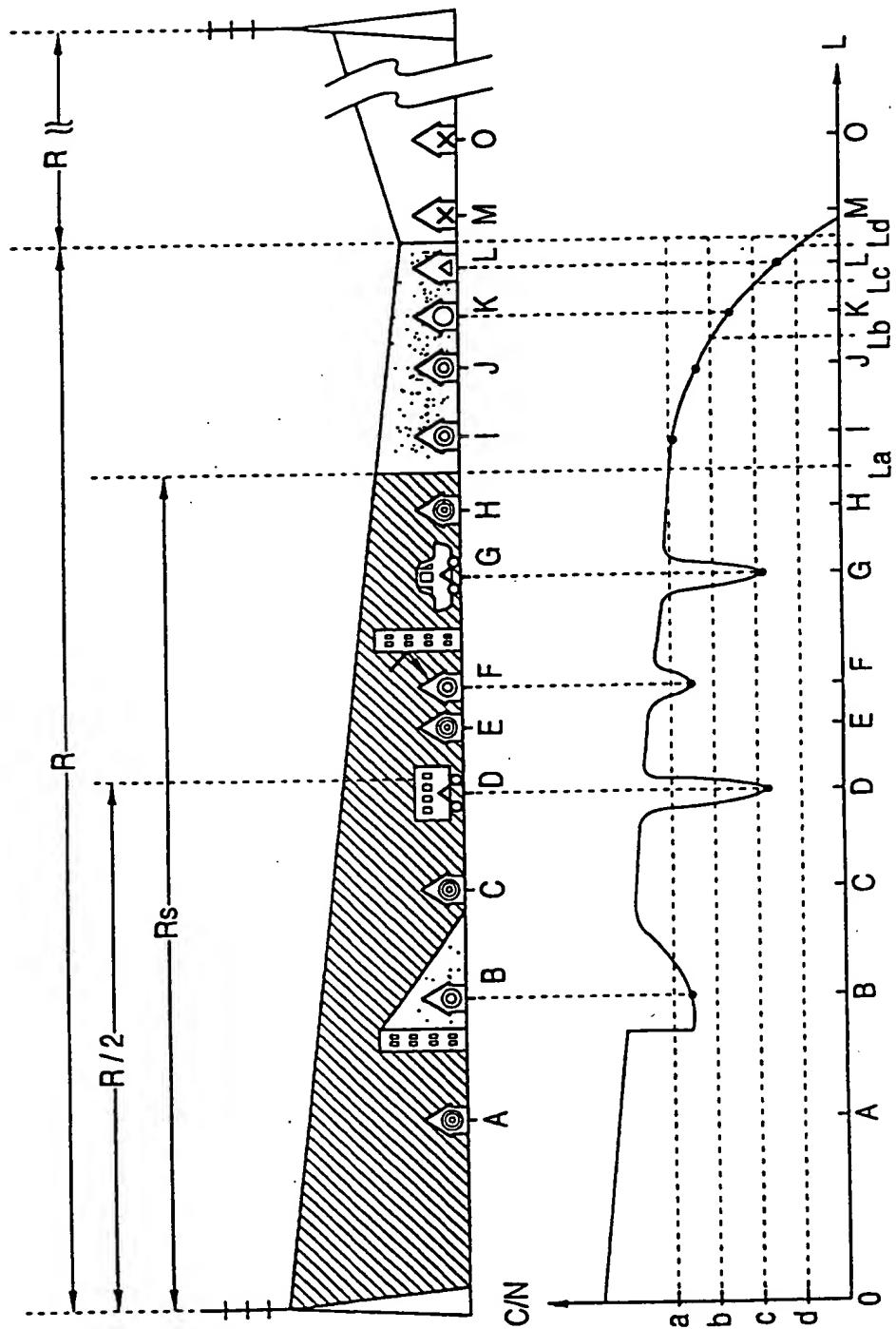


FIG. 98

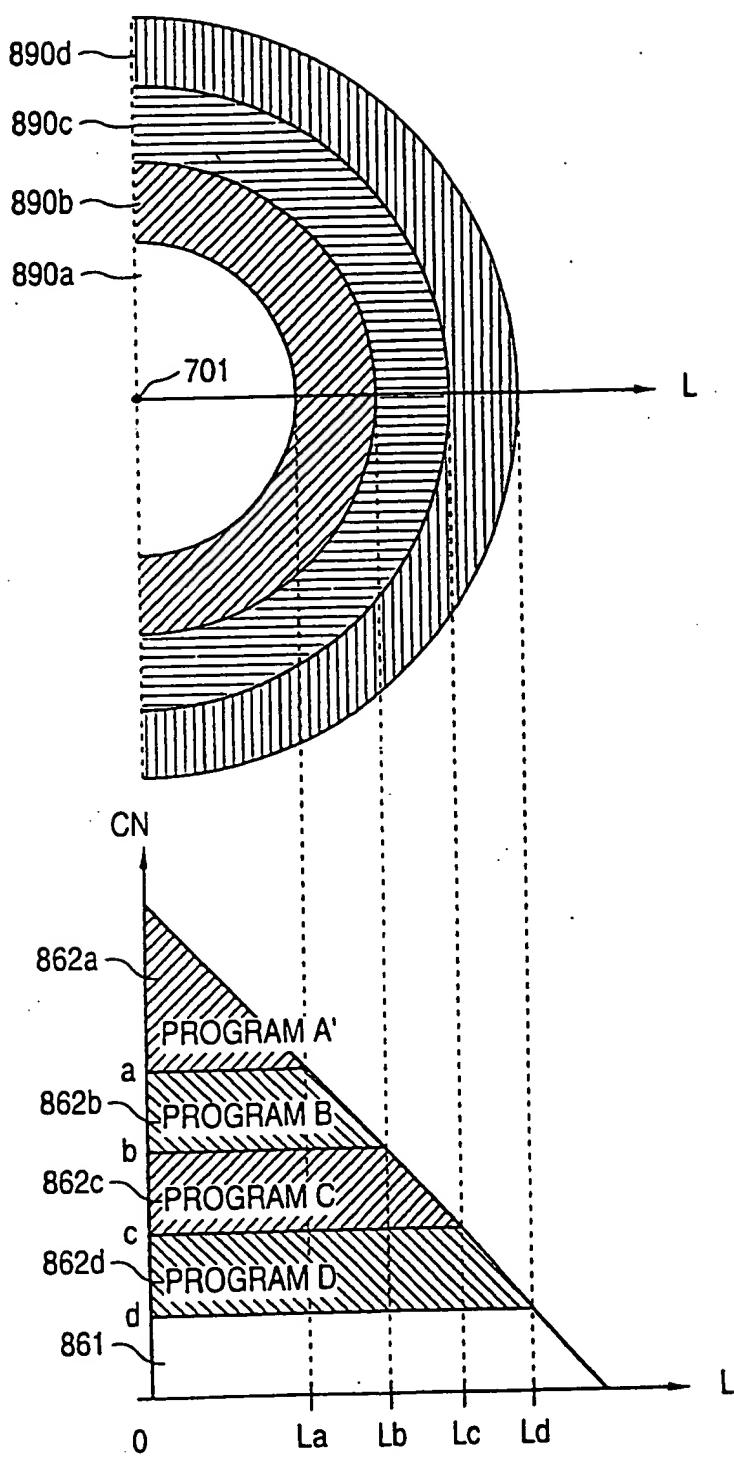


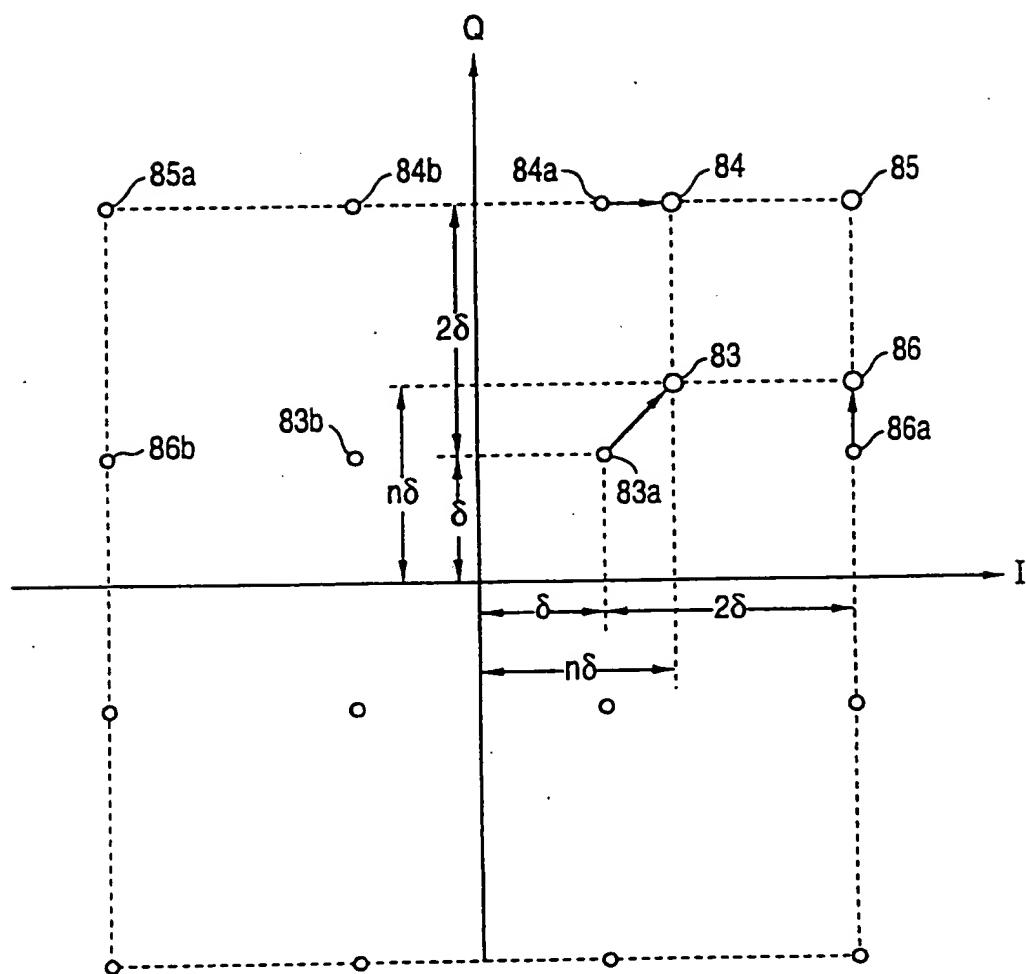
FIG. 99

FIG. 100

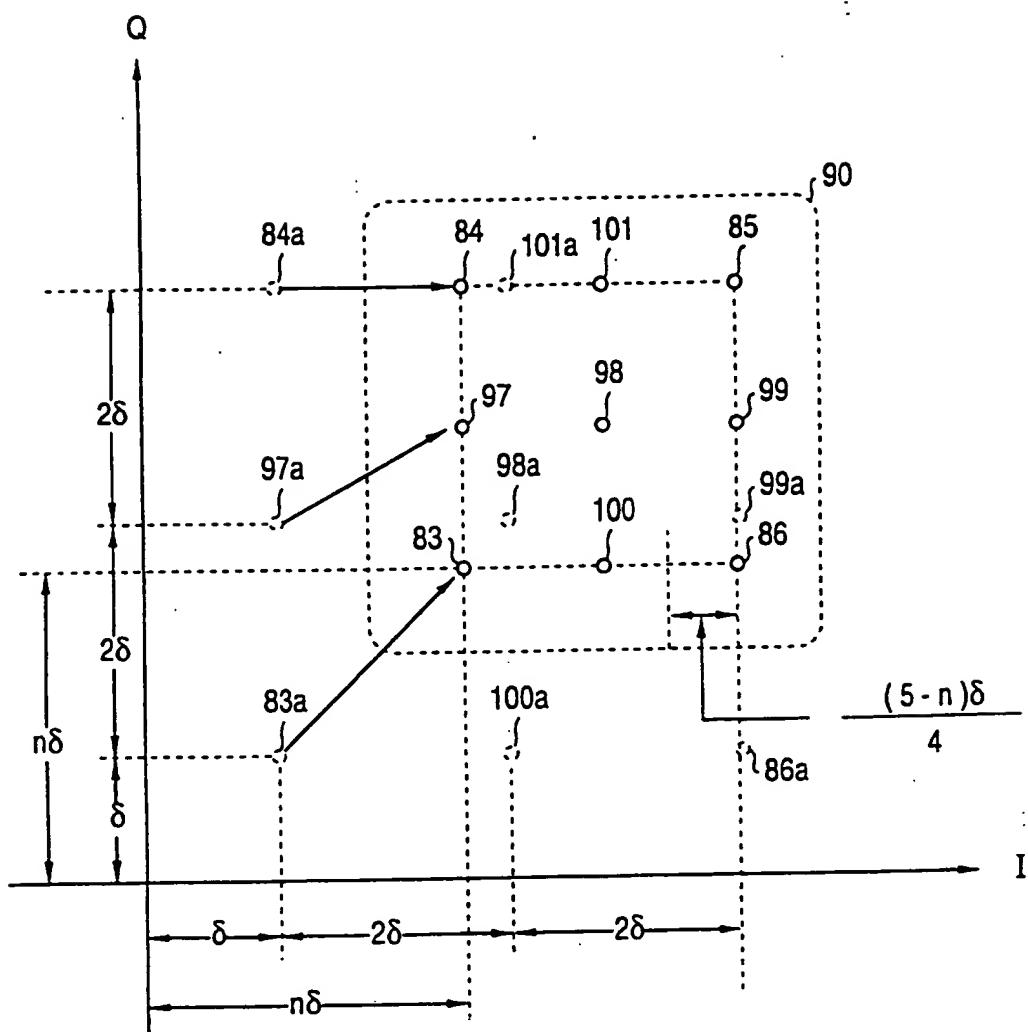


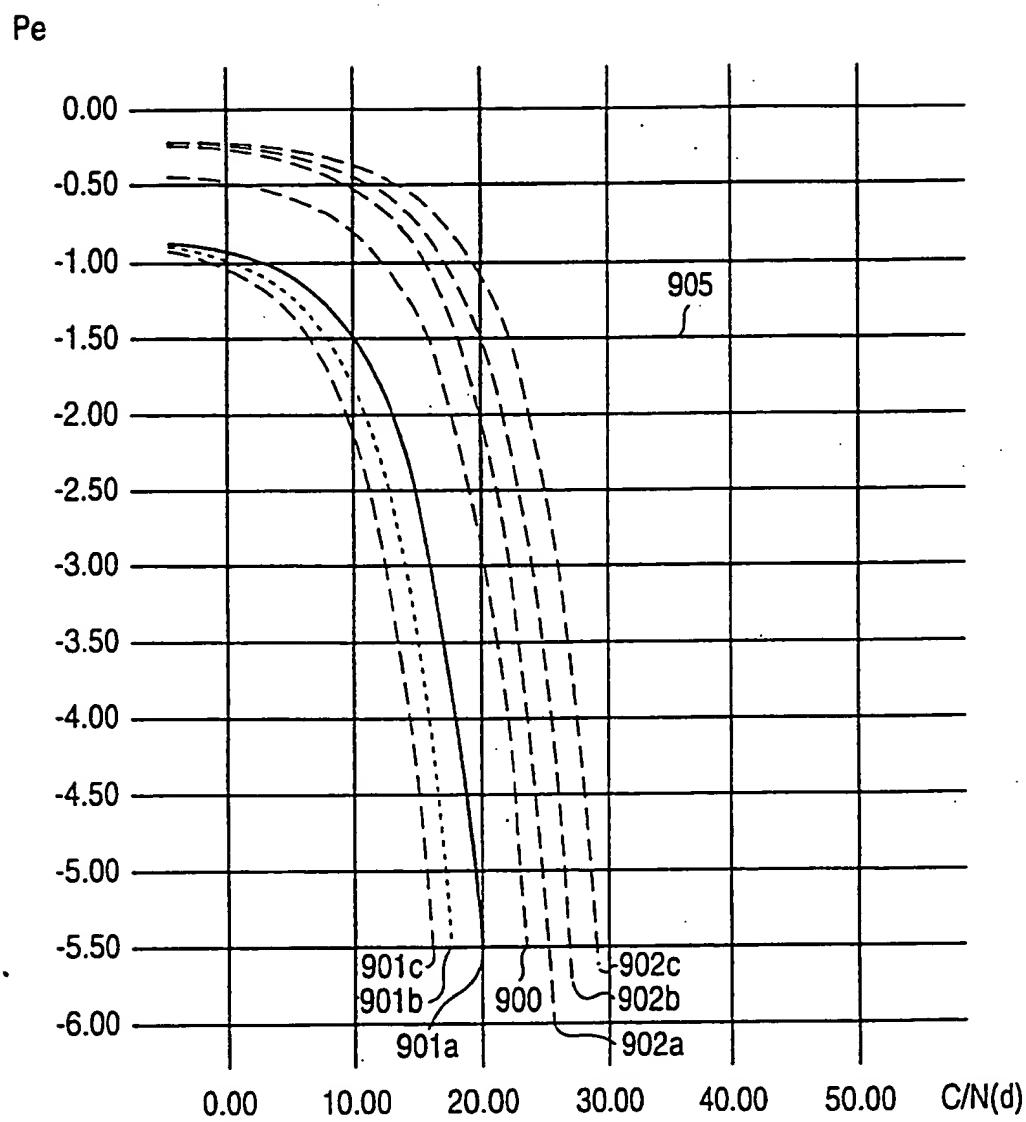
FIG. 101

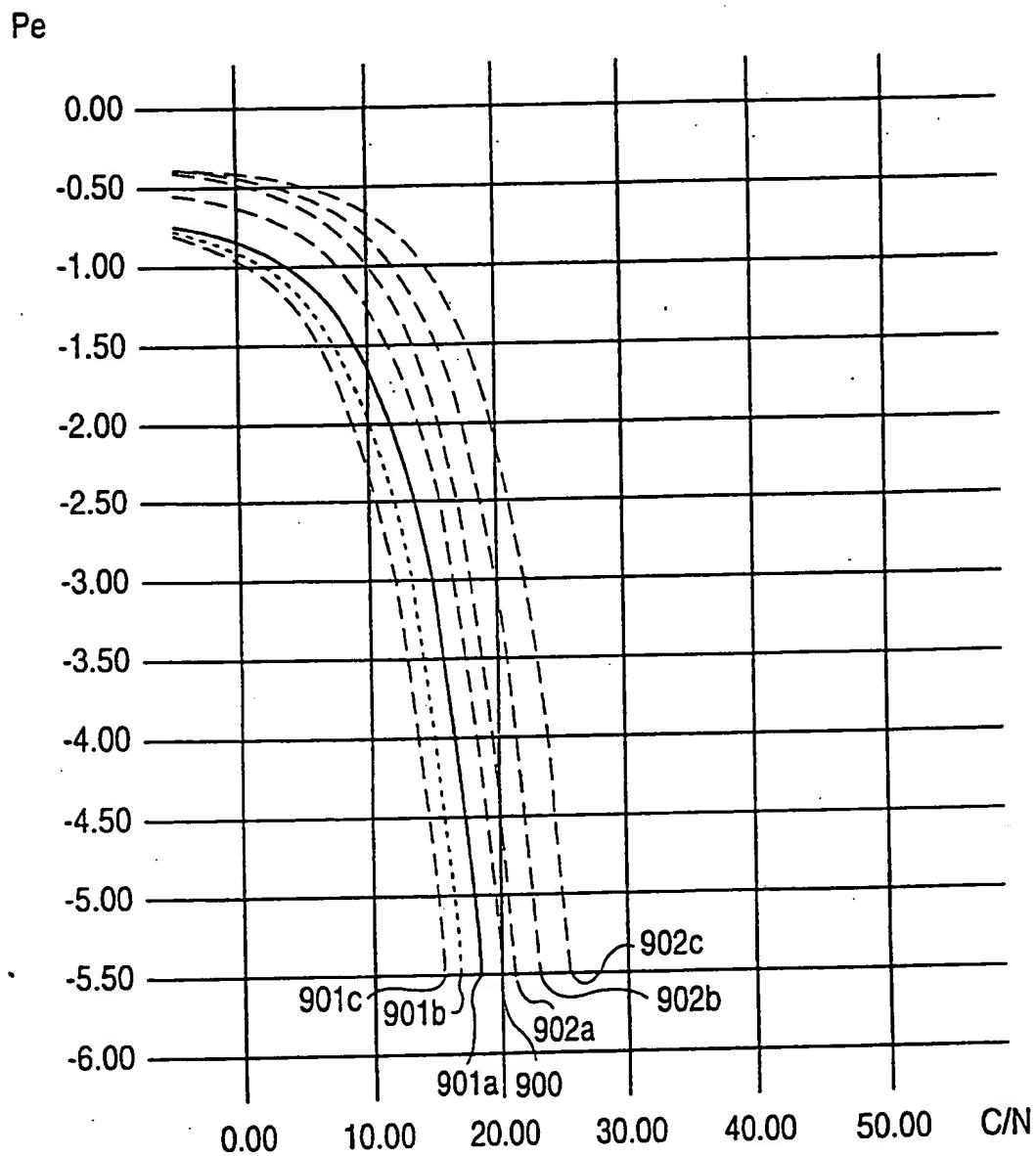
FIG. 102

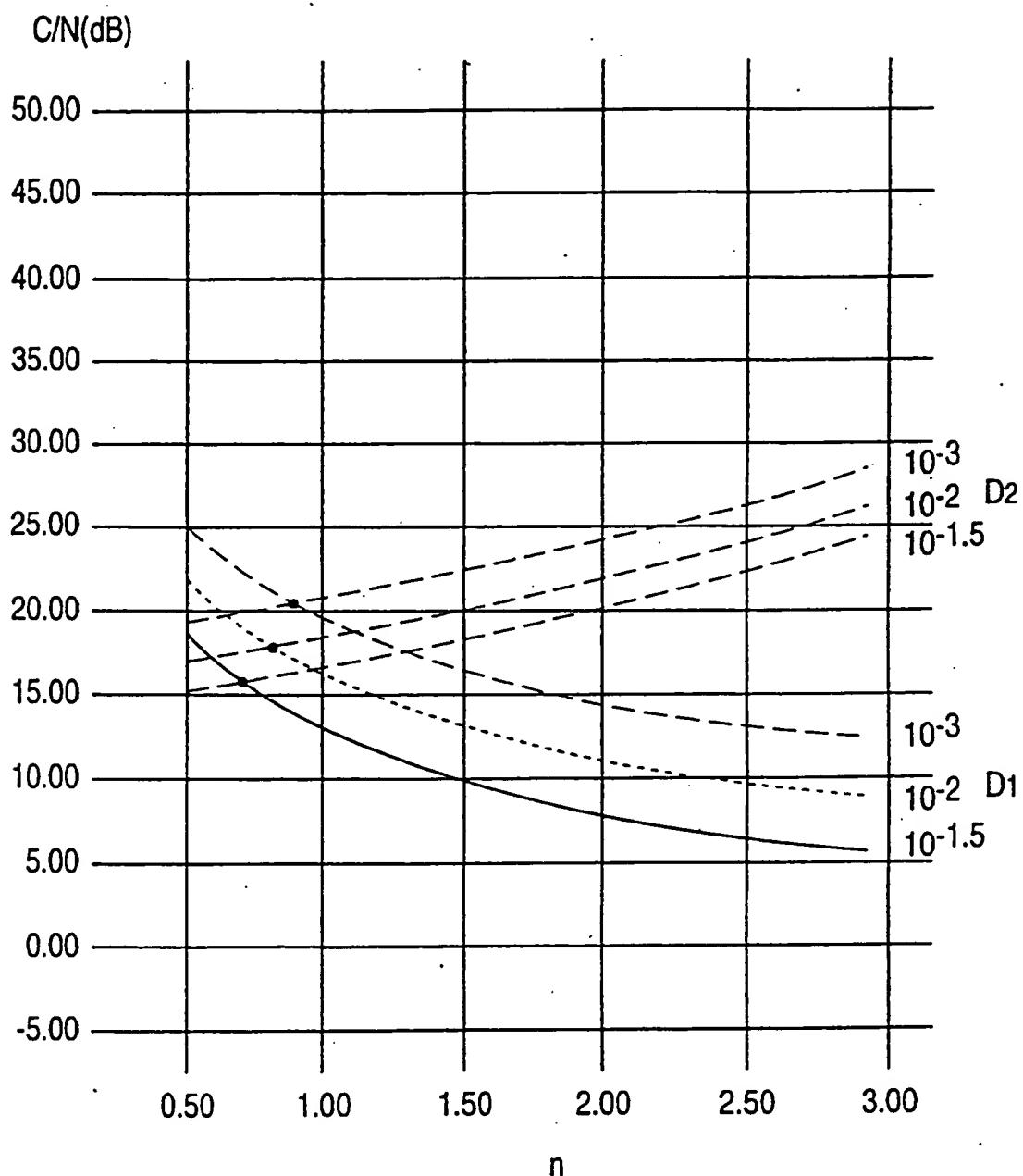
FIG. 103

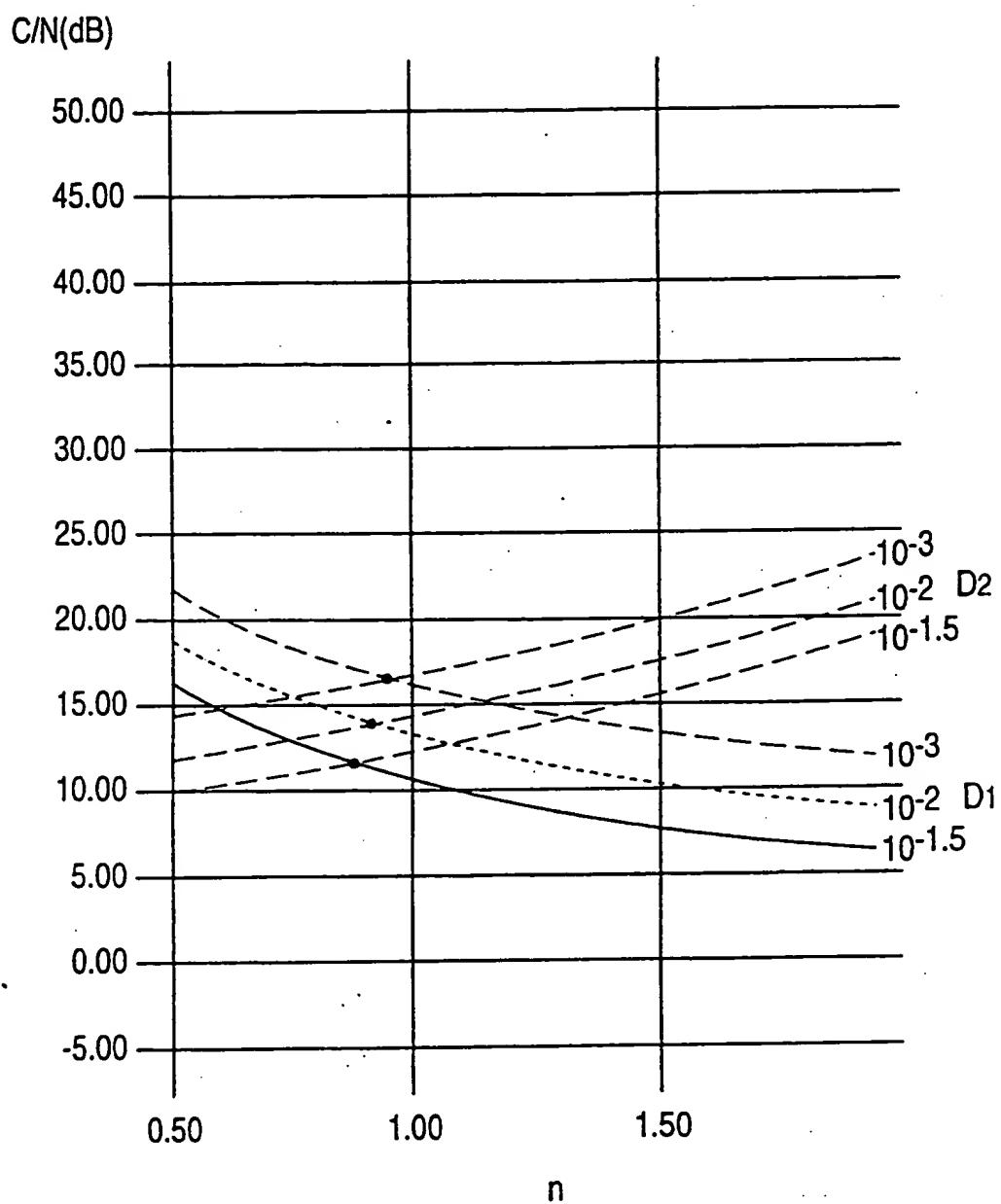
FIG. 104

FIG. 105

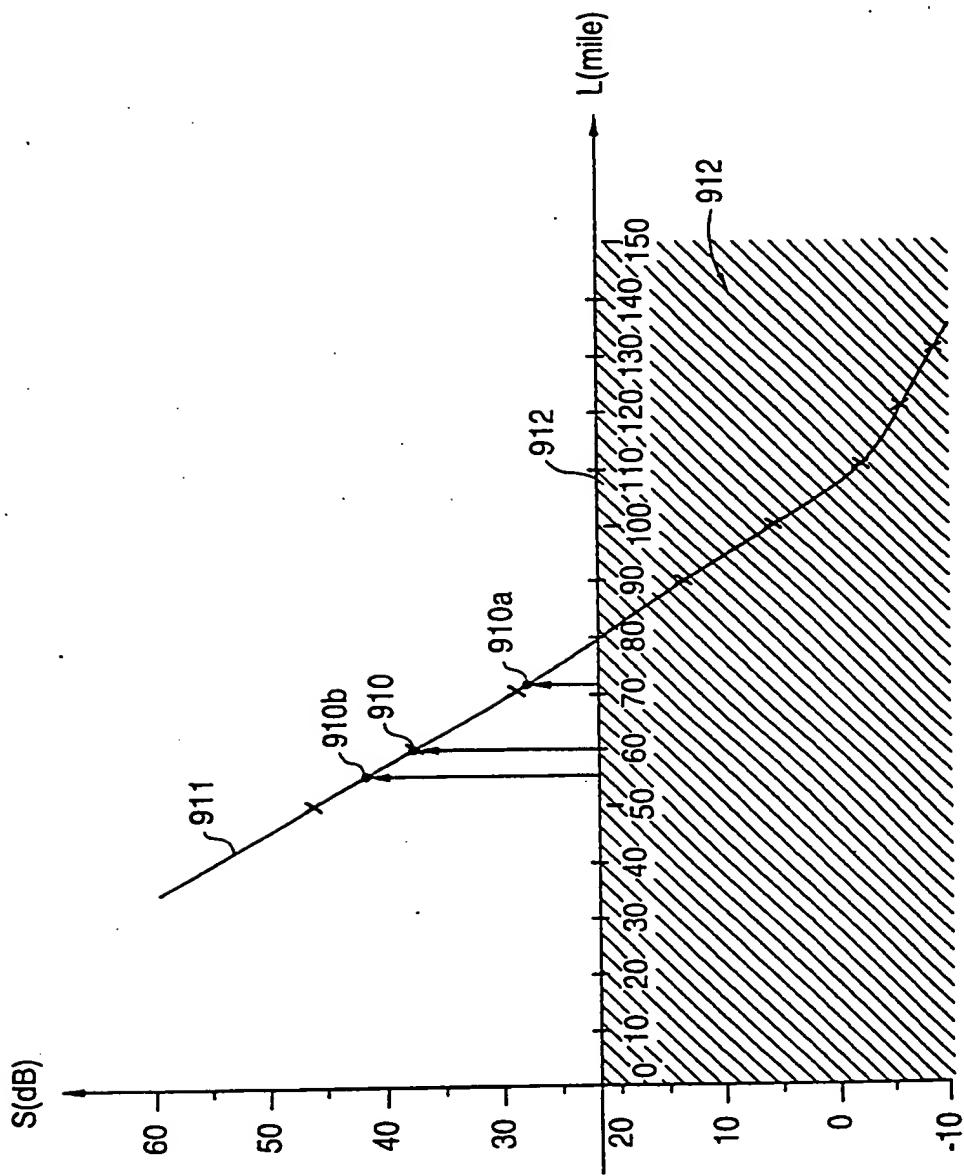


FIG. 106

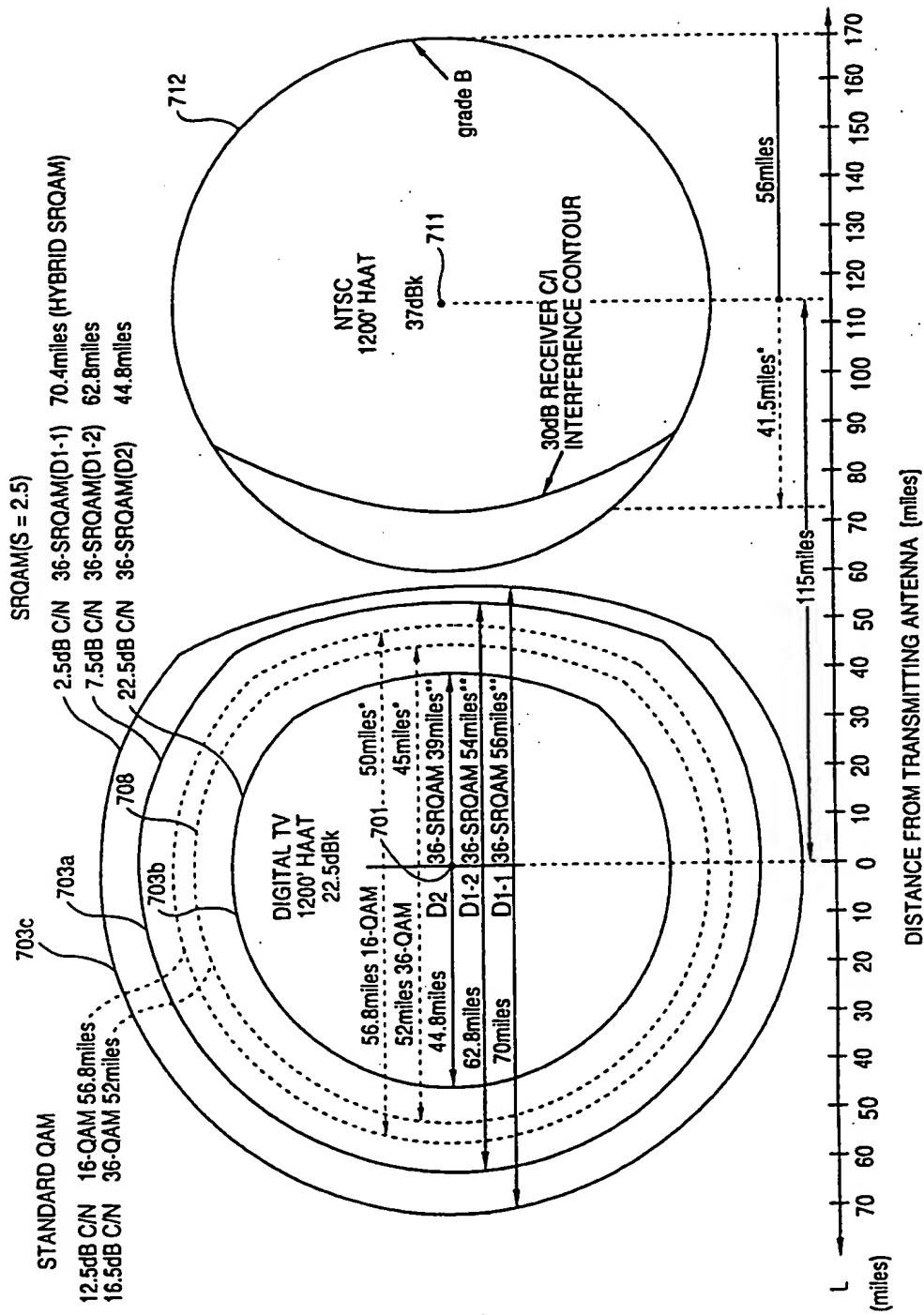


FIG. 107

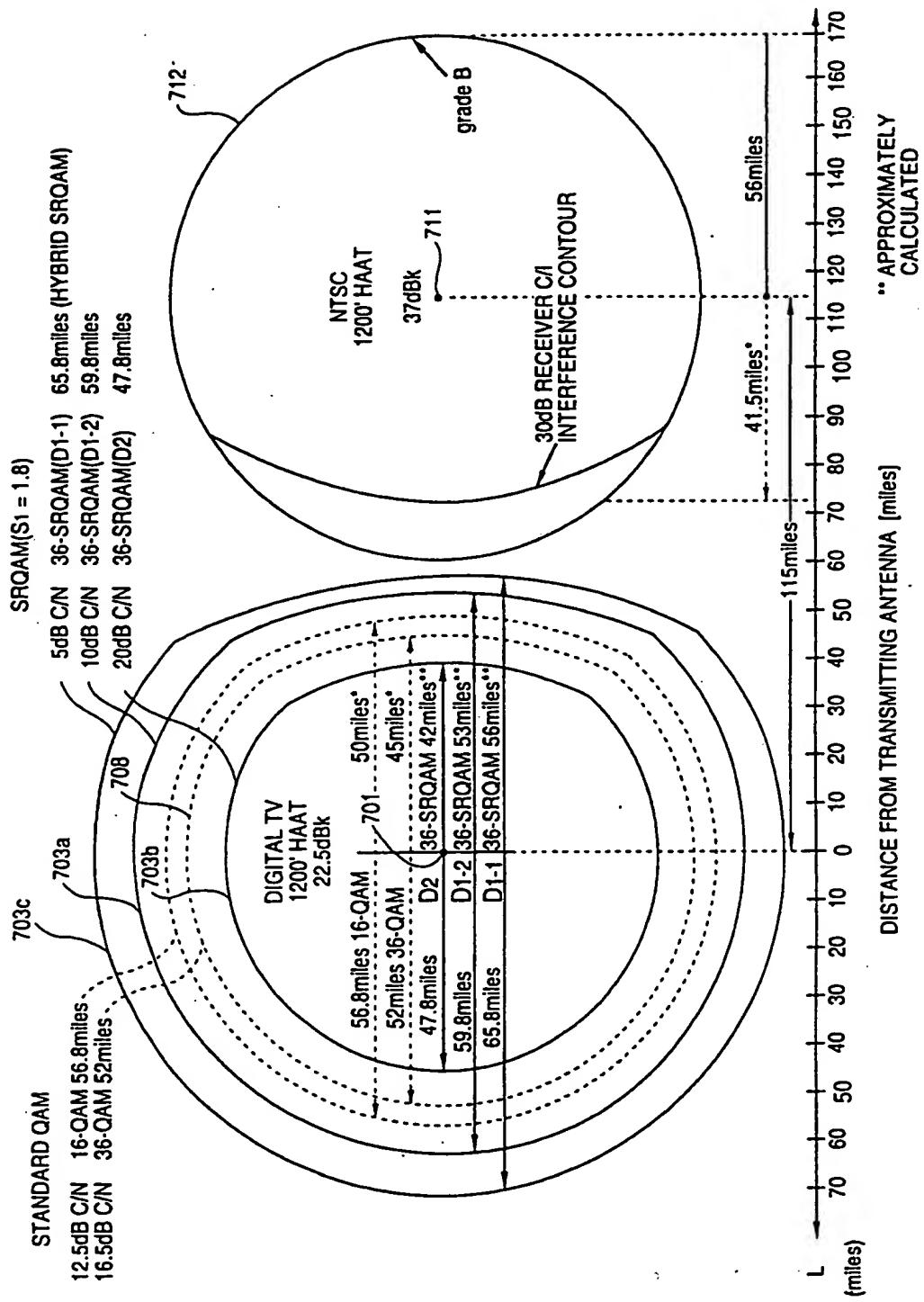


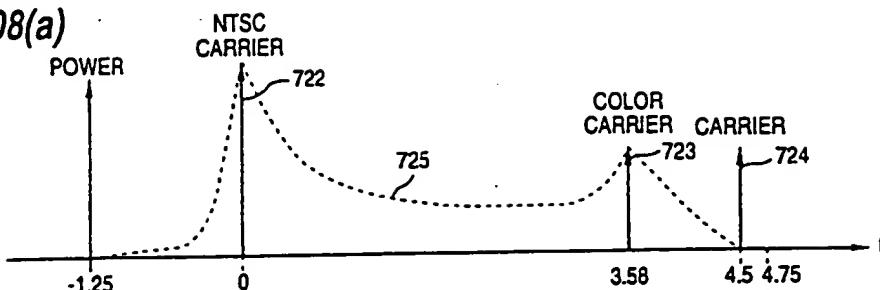
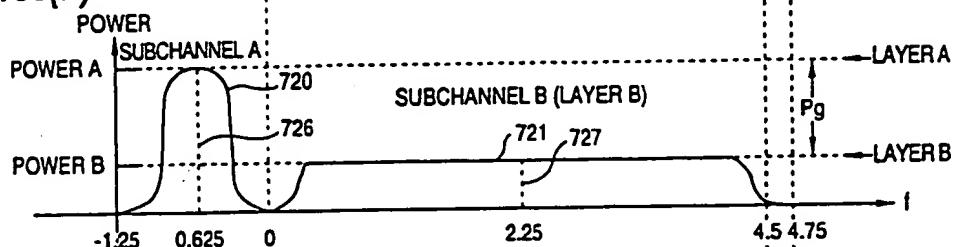
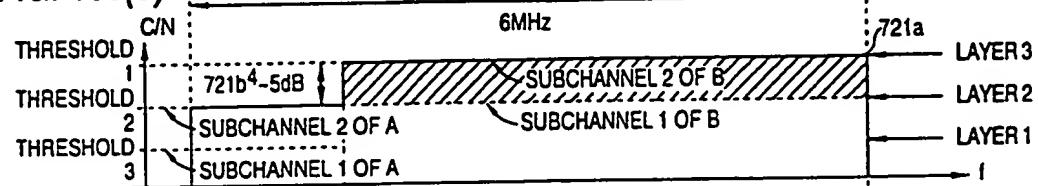
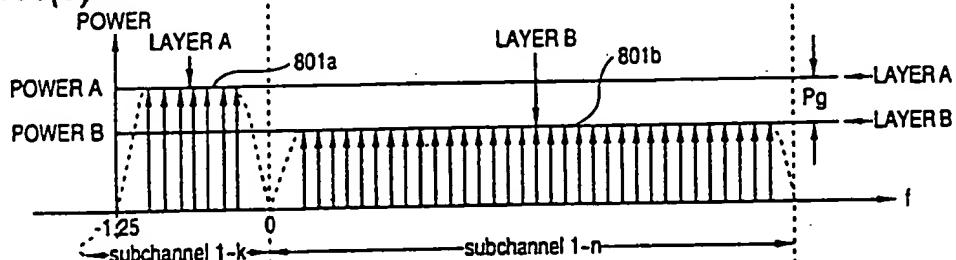
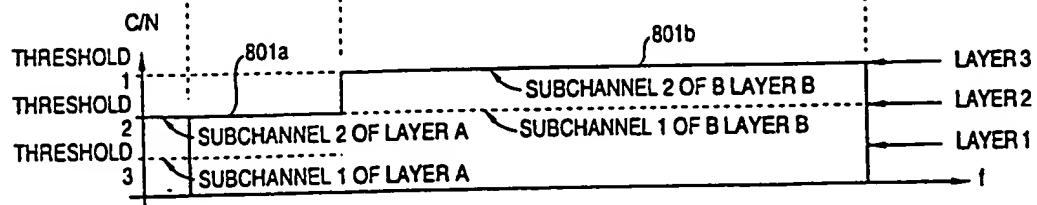
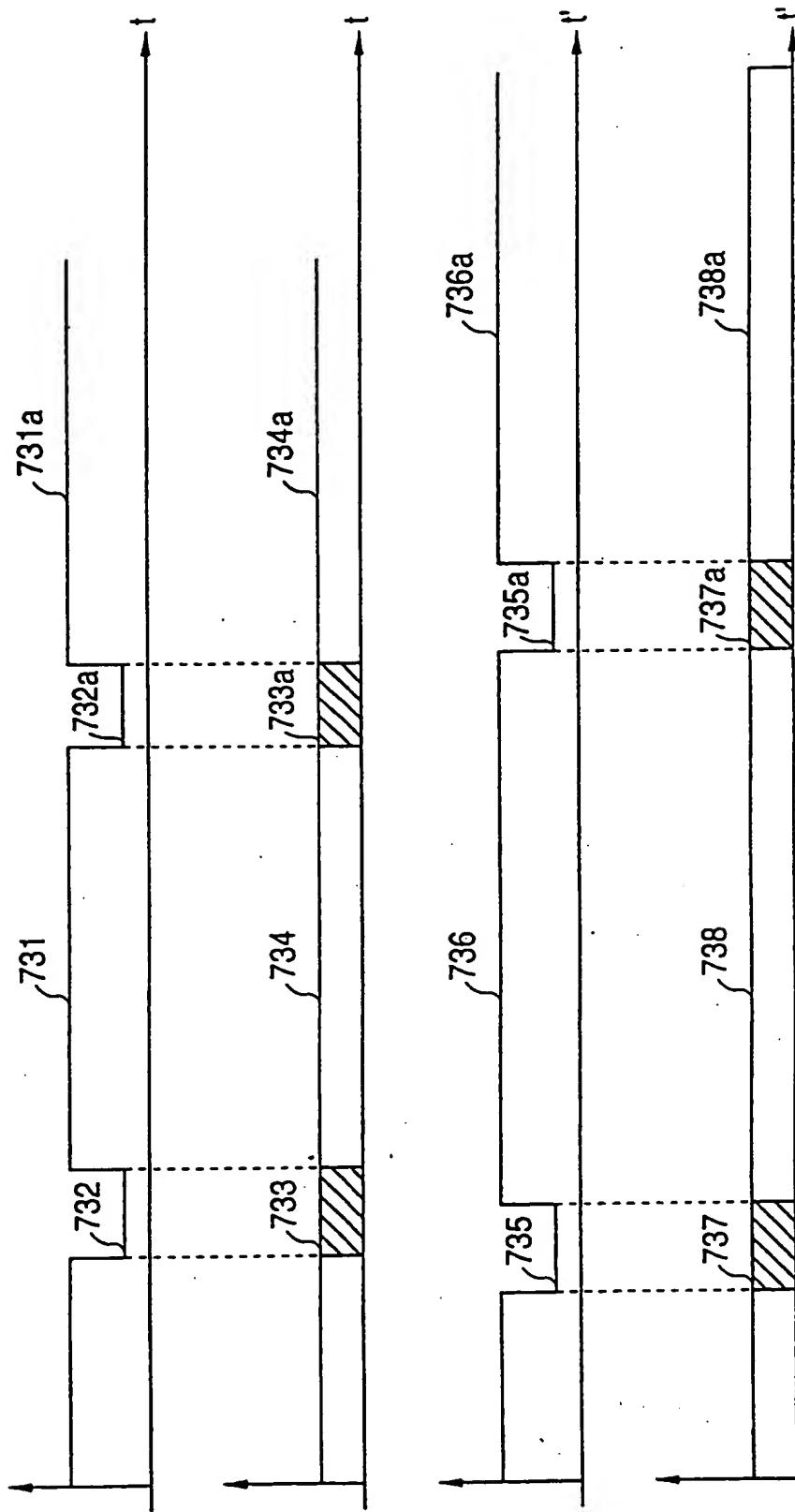
FIG. 108(a)**FIG. 108(b)****FIG. 108(c)****FIG. 108(d)****FIG. 108(e)**

FIG. 109



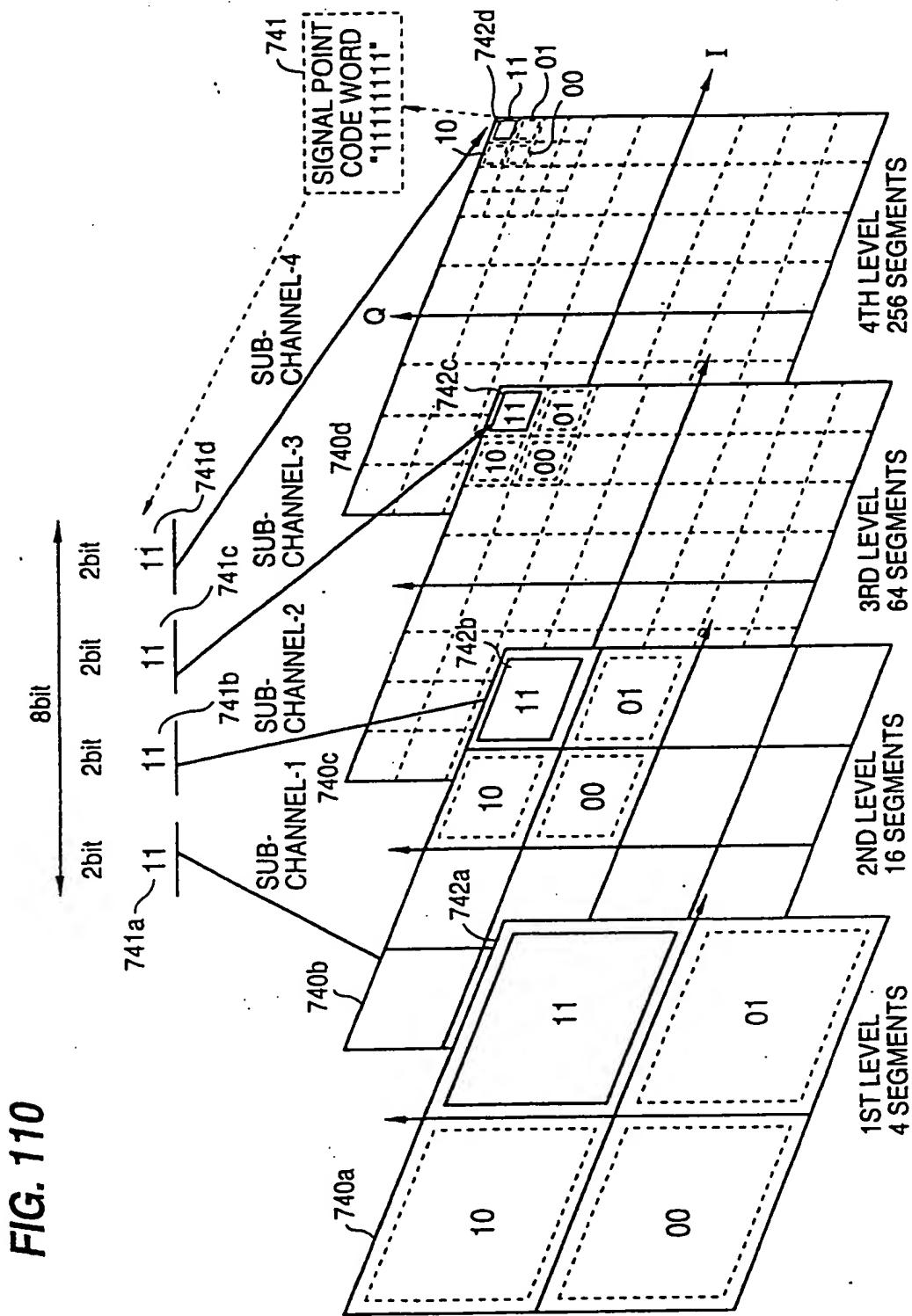
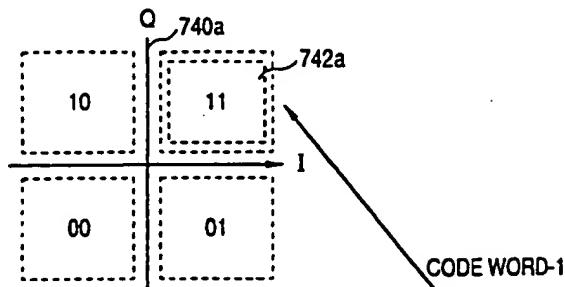
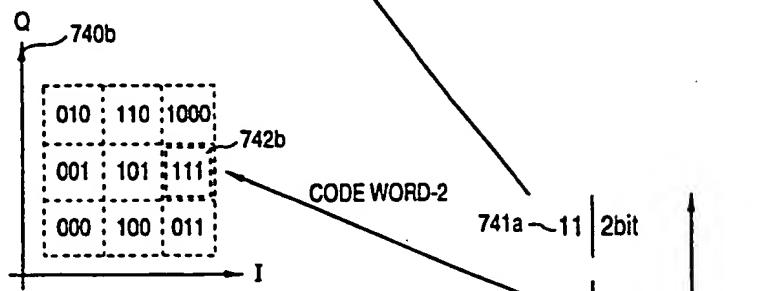


FIG. 111

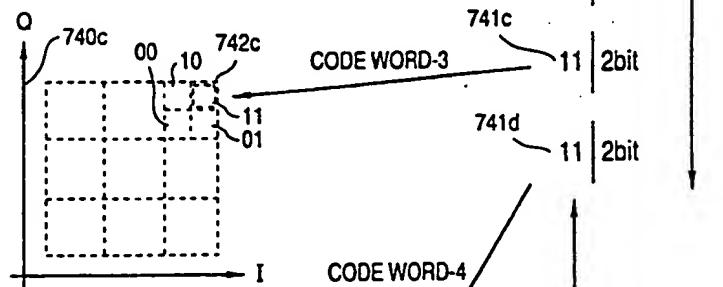
SUBCHANNEL-1 (SRQAM:D1 = 2bit)



SUBCHANNEL-2 (36-SRQAM:D2 = 3bit + 1/8bit)



SUBCHANNEL-3 (144-SRQAM:D3 = 2bit)



SUBCHANNEL-4 (576-SRQAM:D4 = 2bit)

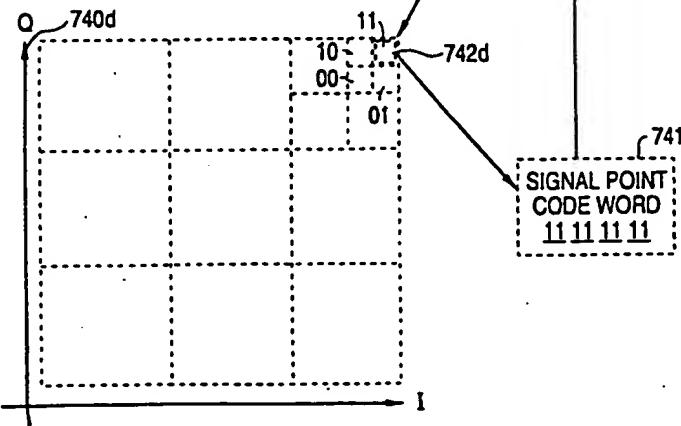
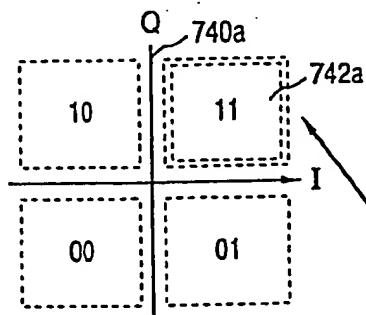
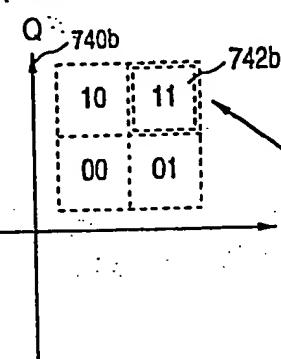


FIG. 112 (Amended)

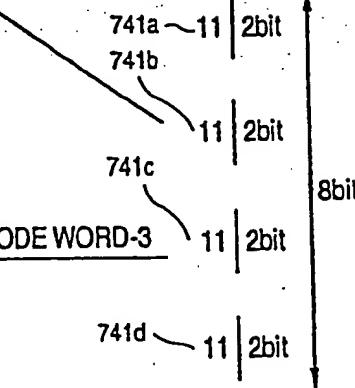
SUBCHANNEL-1 (SRQAM:D1 = 2bit)



SUBCHANNEL-2 (16-SRQAM:D2 = 2bit)

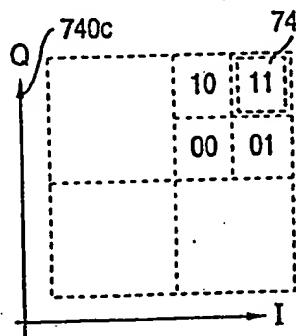


CODE WORD-1



CODE WORD-2

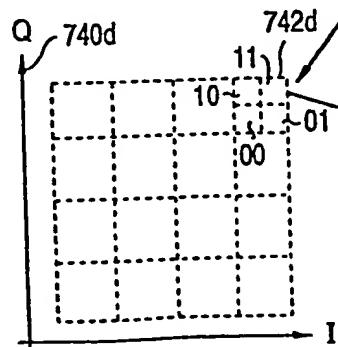
SUBCHANNEL-3 (64-SRQAM:D3 = 2bit)



CODE WORD-3

741d | 2bit

SUBCHANNEL-4 (256-SRQAM:D4 = 2bit)



CODE WORD-4

741
SIGNAL POINT
CODE WORD
11 11 11 11

FIG. 113

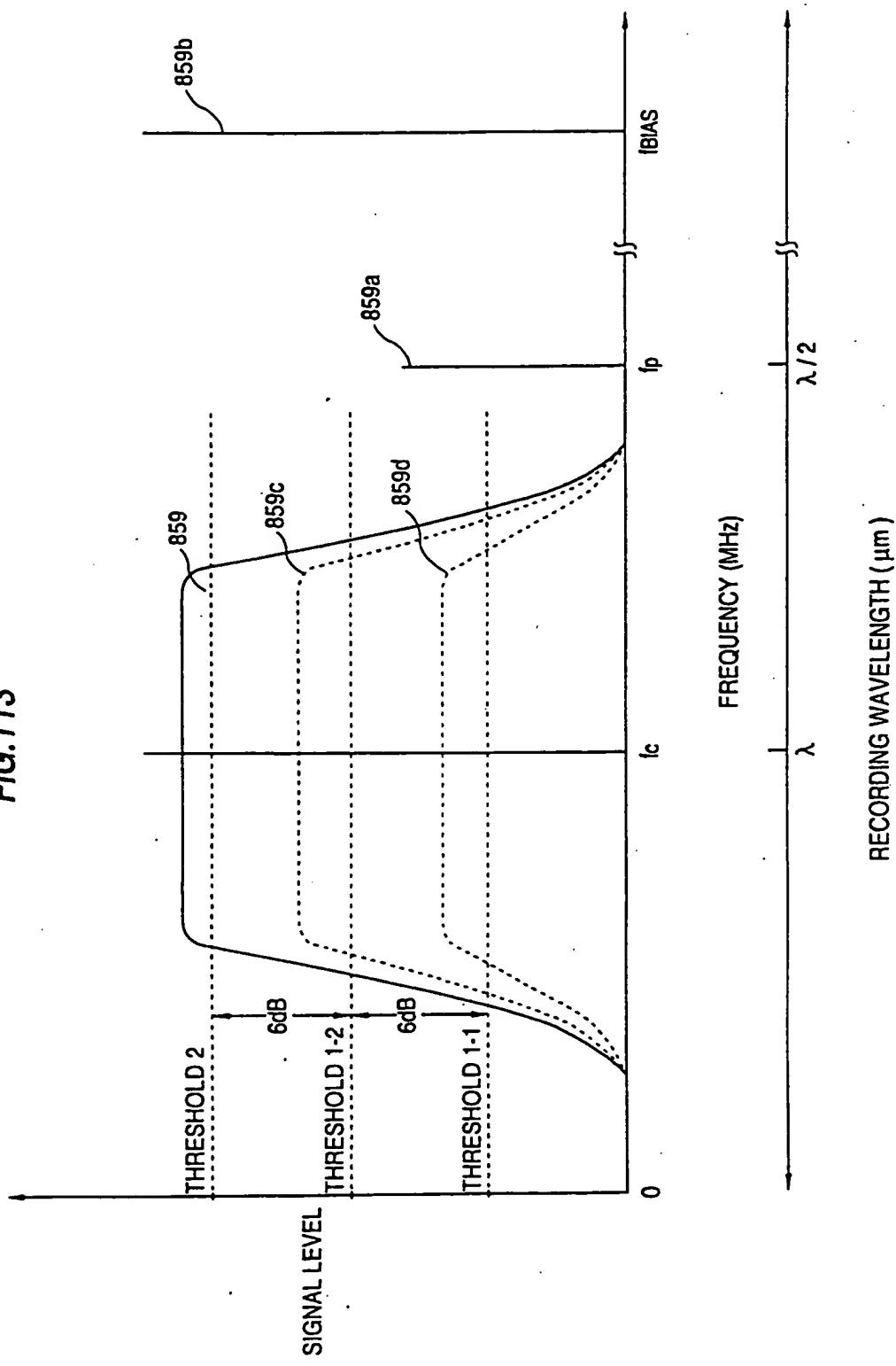


FIG. 114

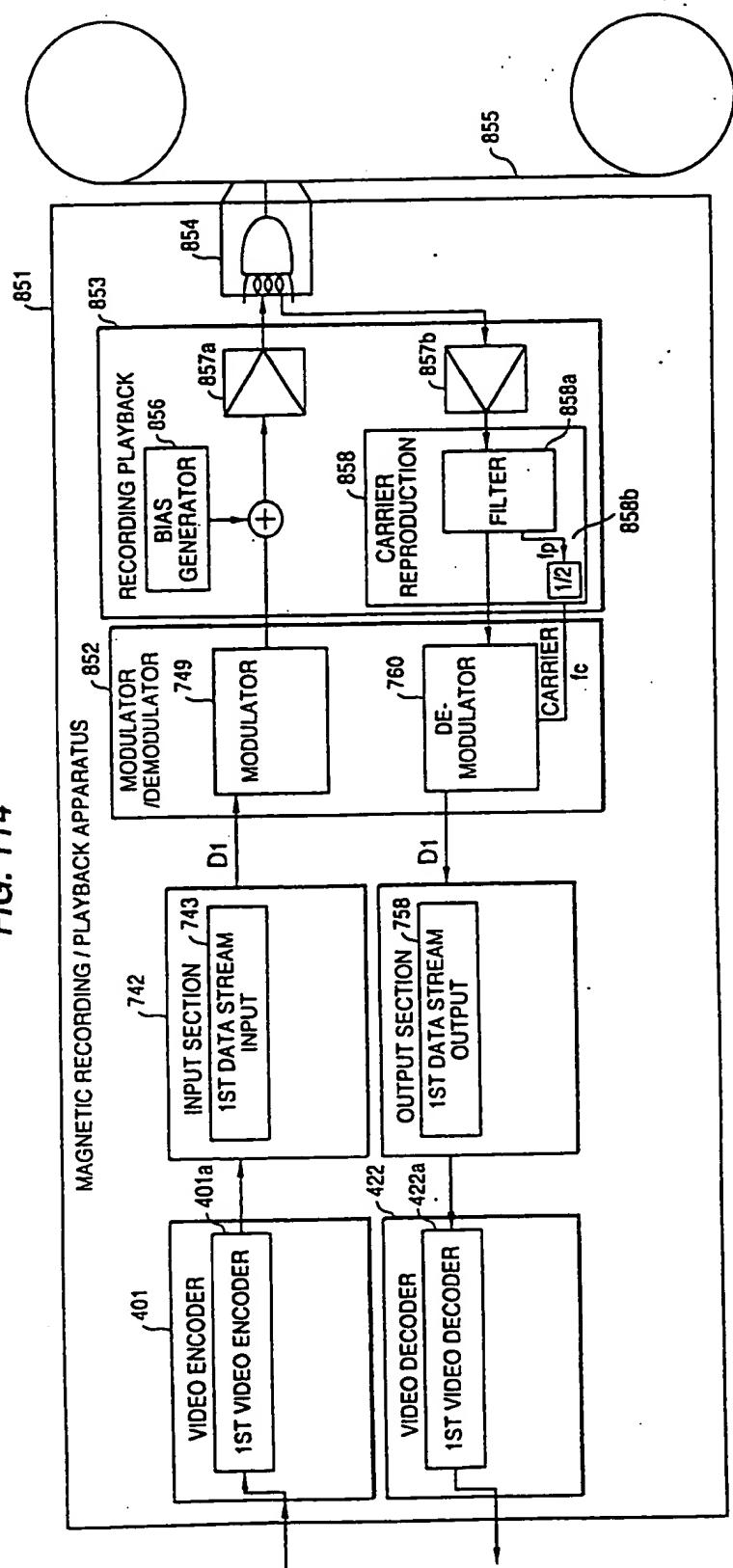


FIG. 115

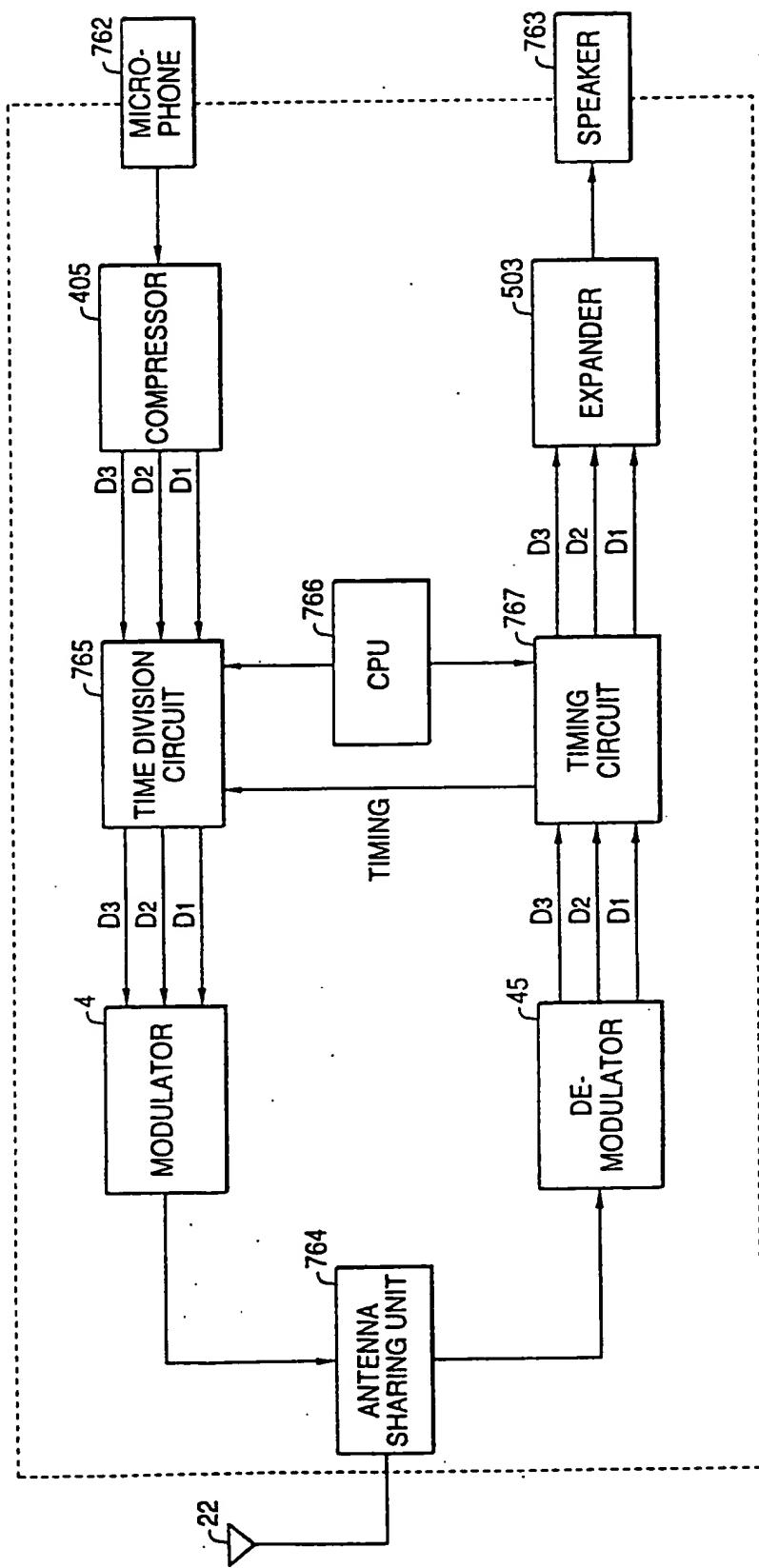
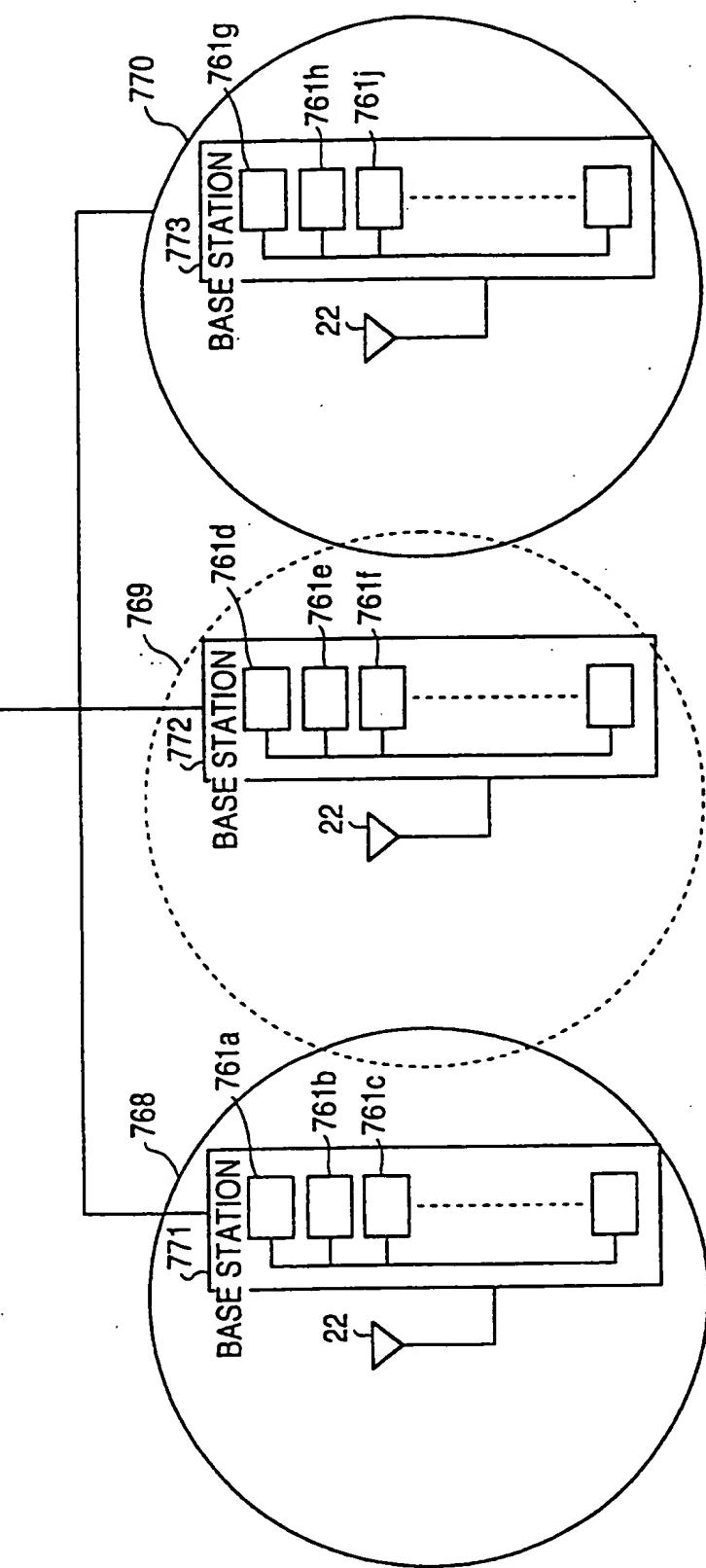


FIG. 116

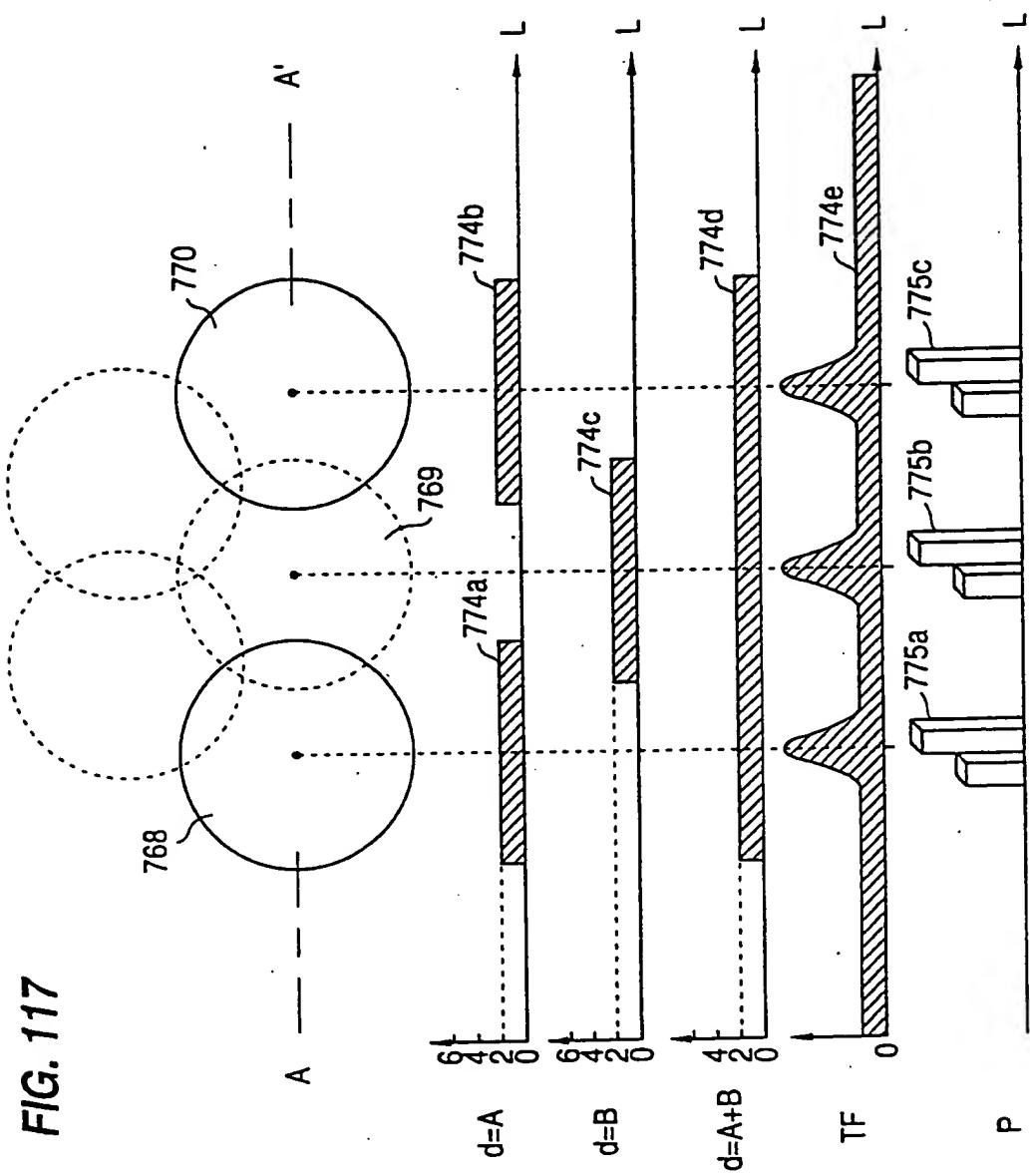


FIG. 118

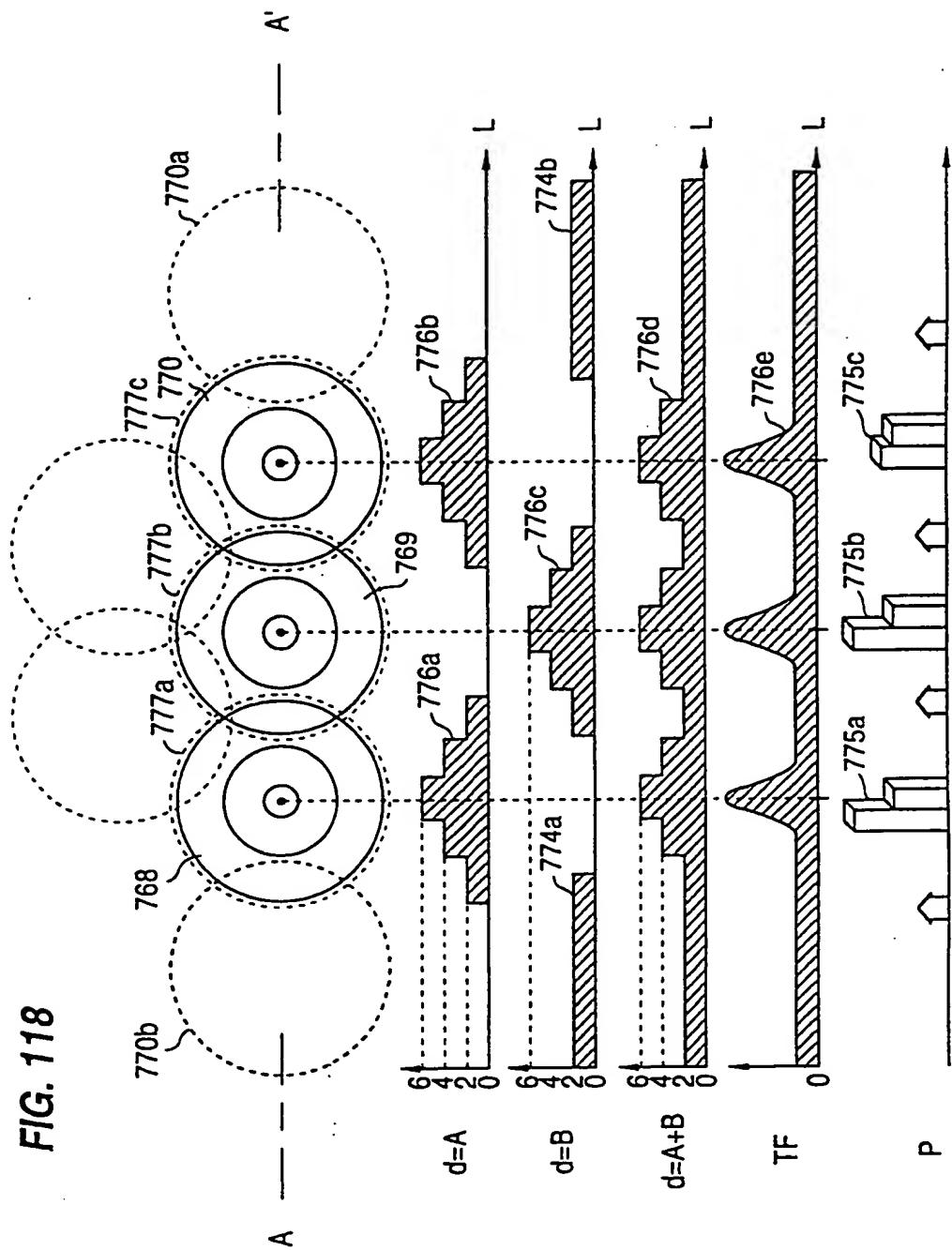


FIG. 119(a)

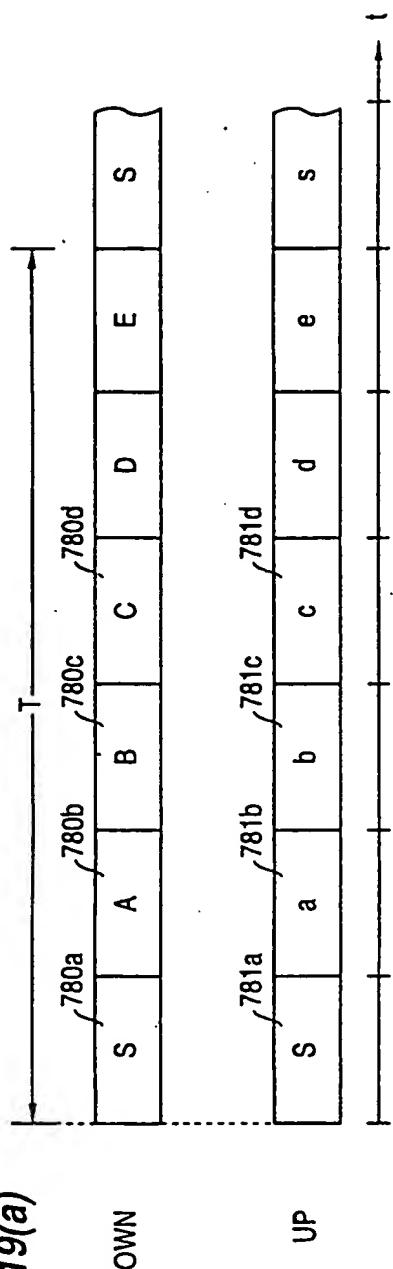


FIG. 119(b)

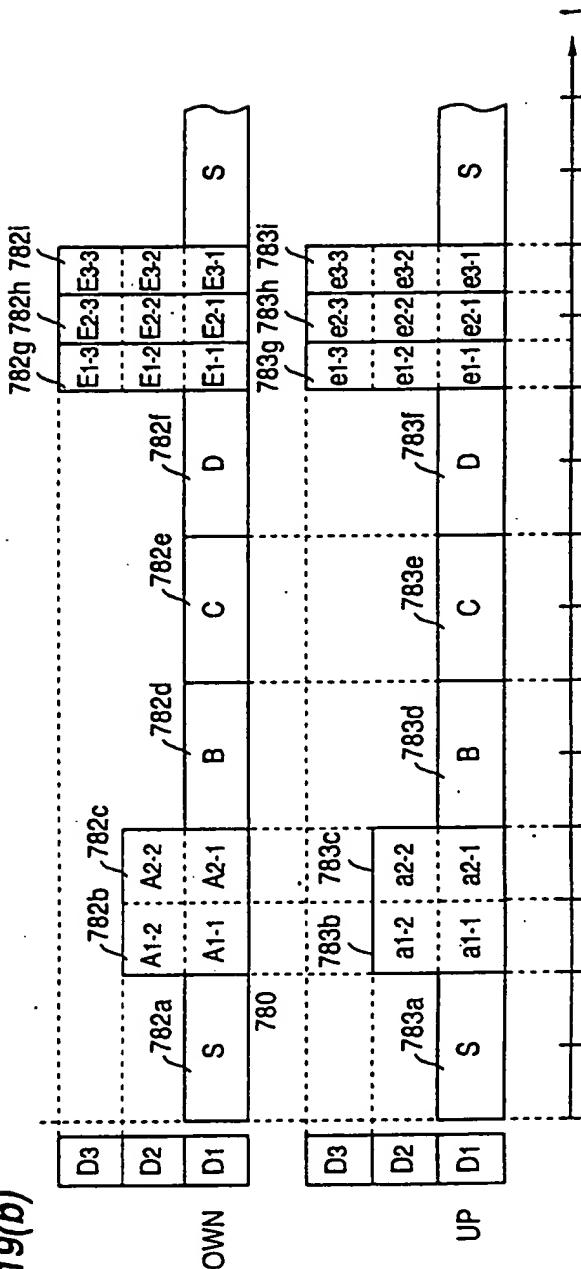


FIG. 120(a)

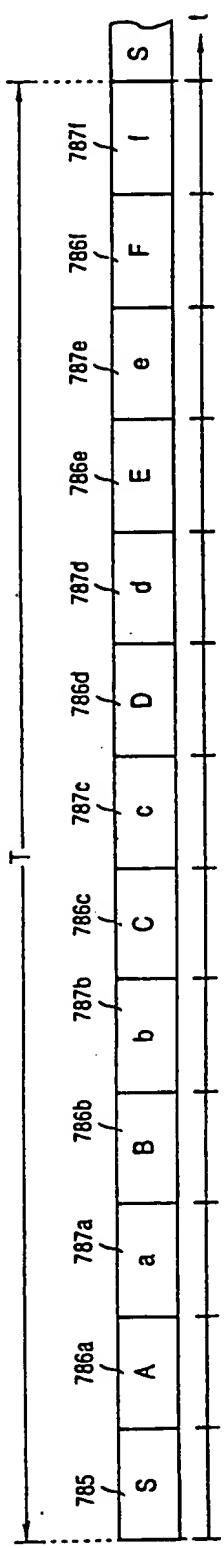


FIG. 120(b)

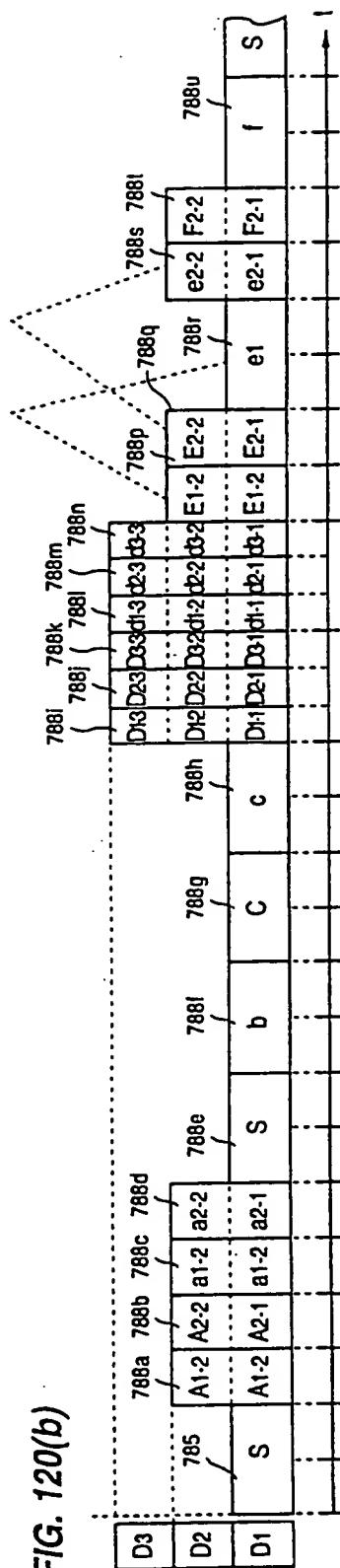


FIG. 121

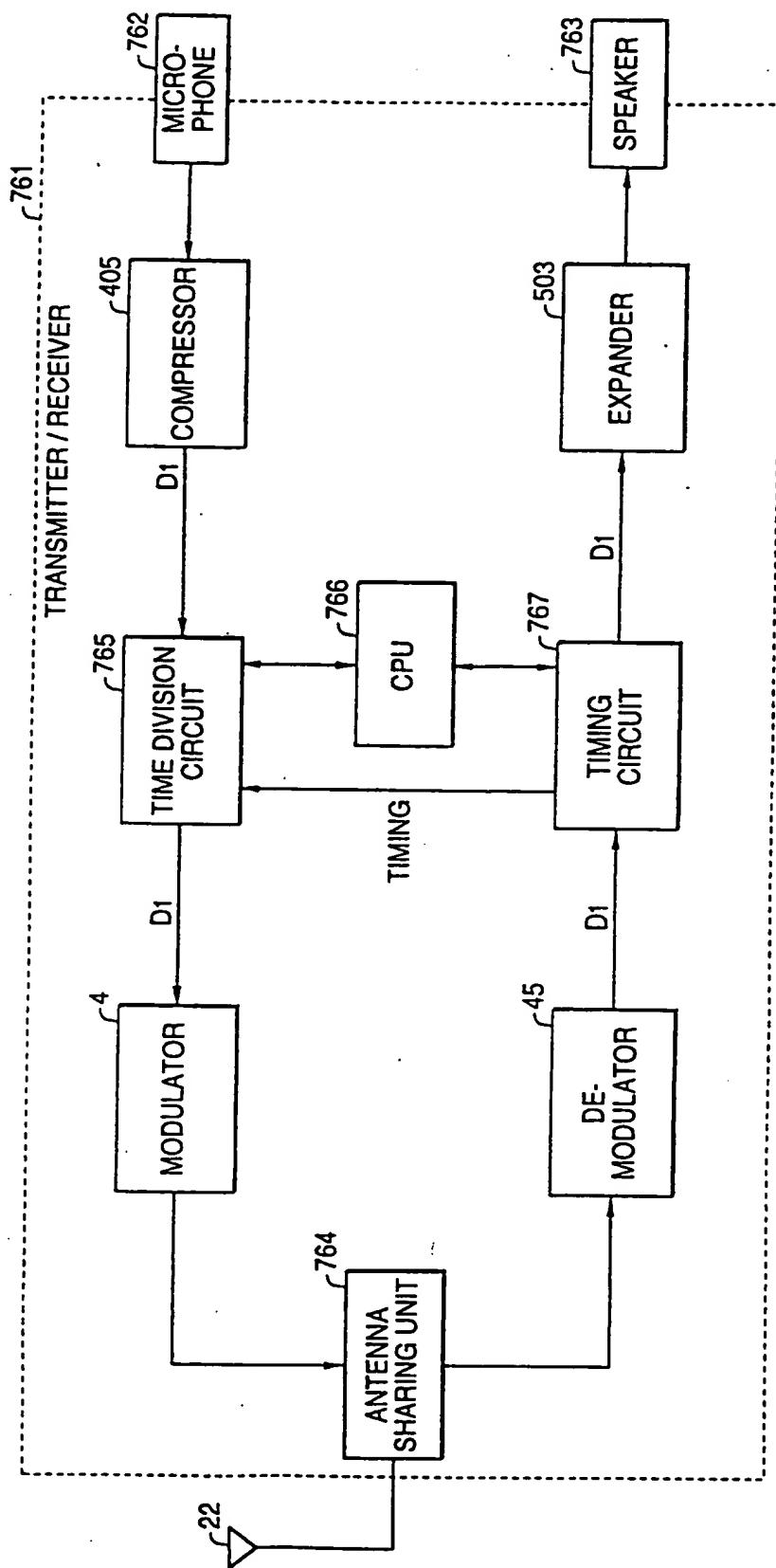


FIG. 122

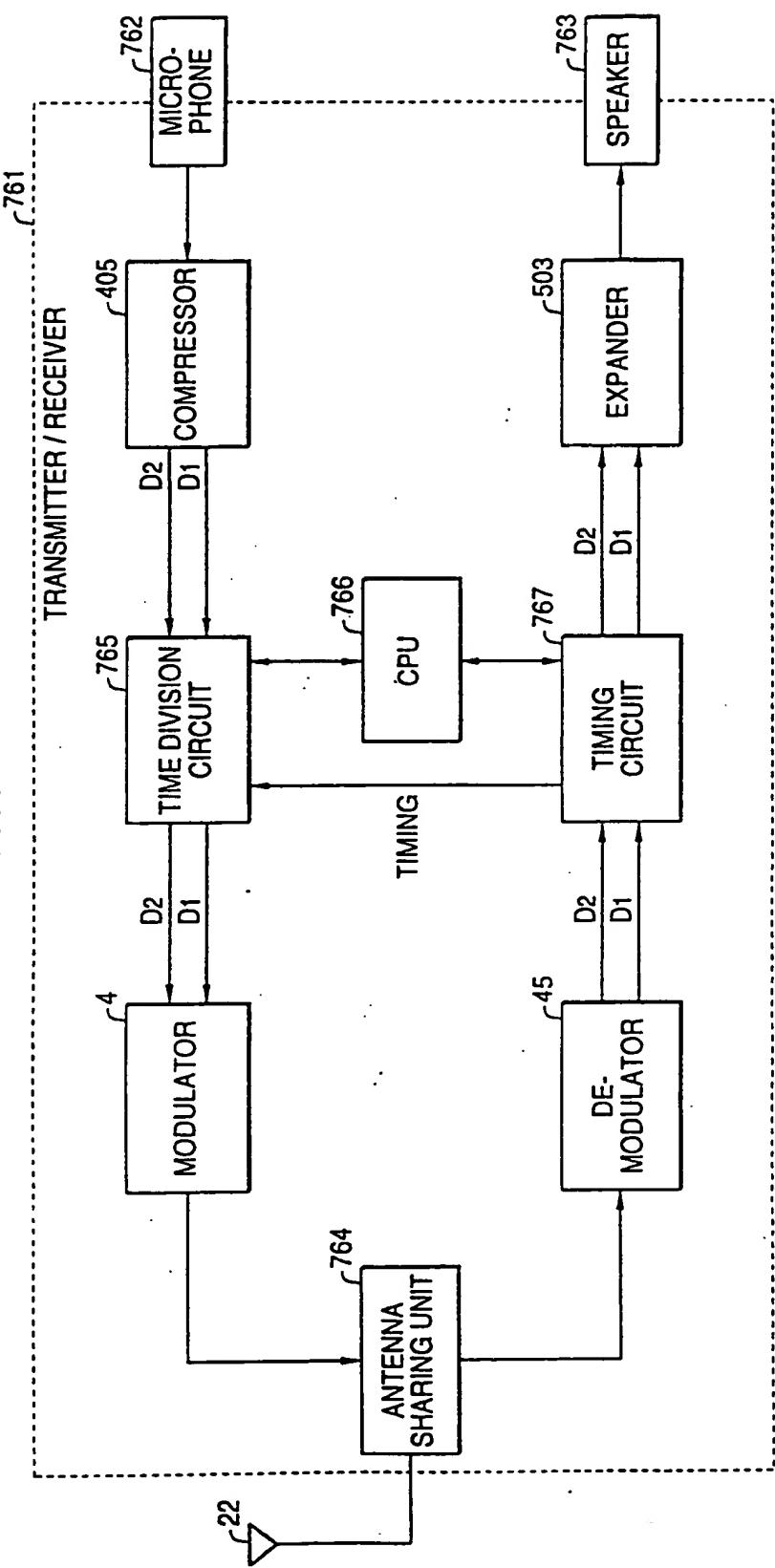
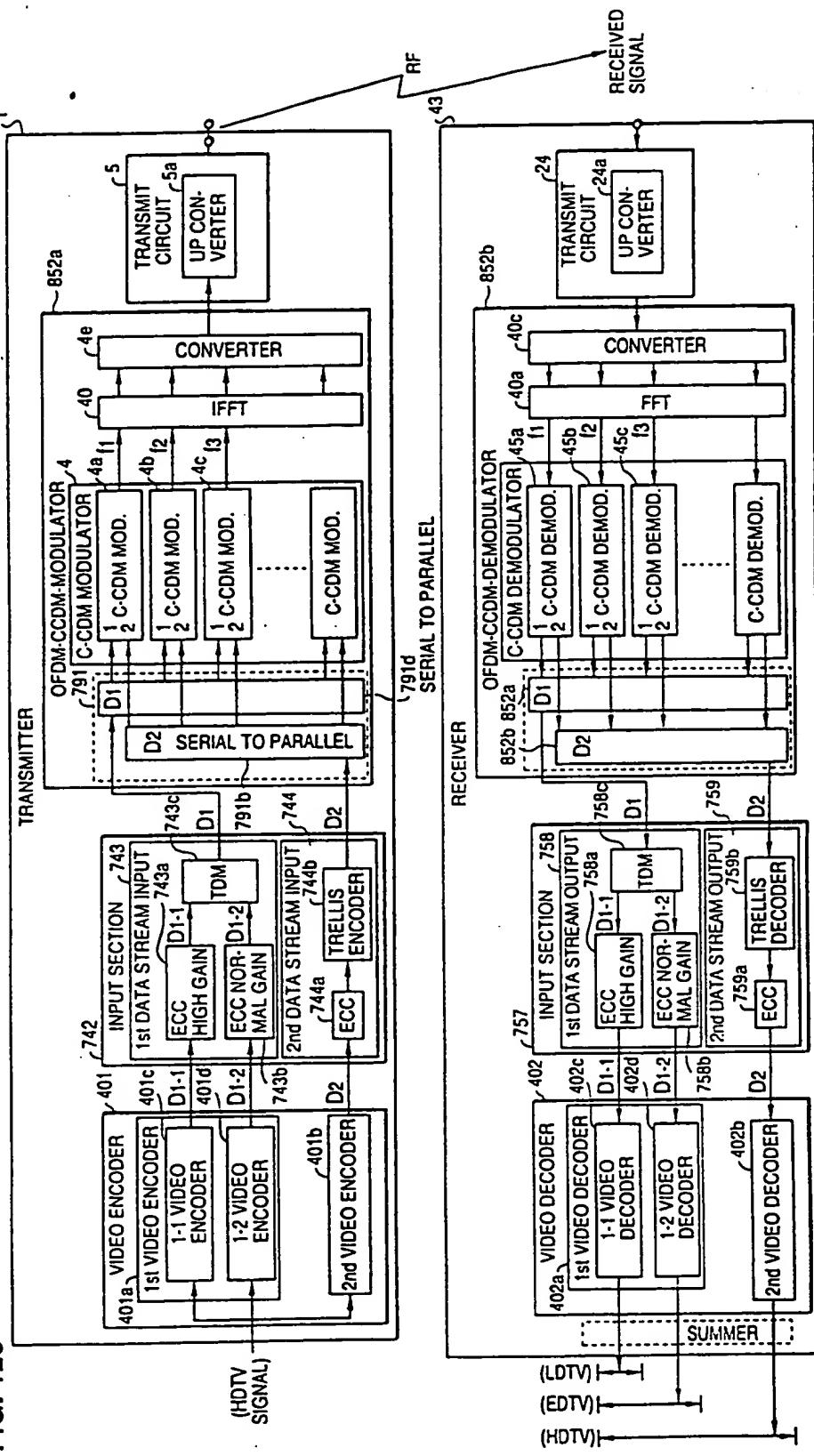
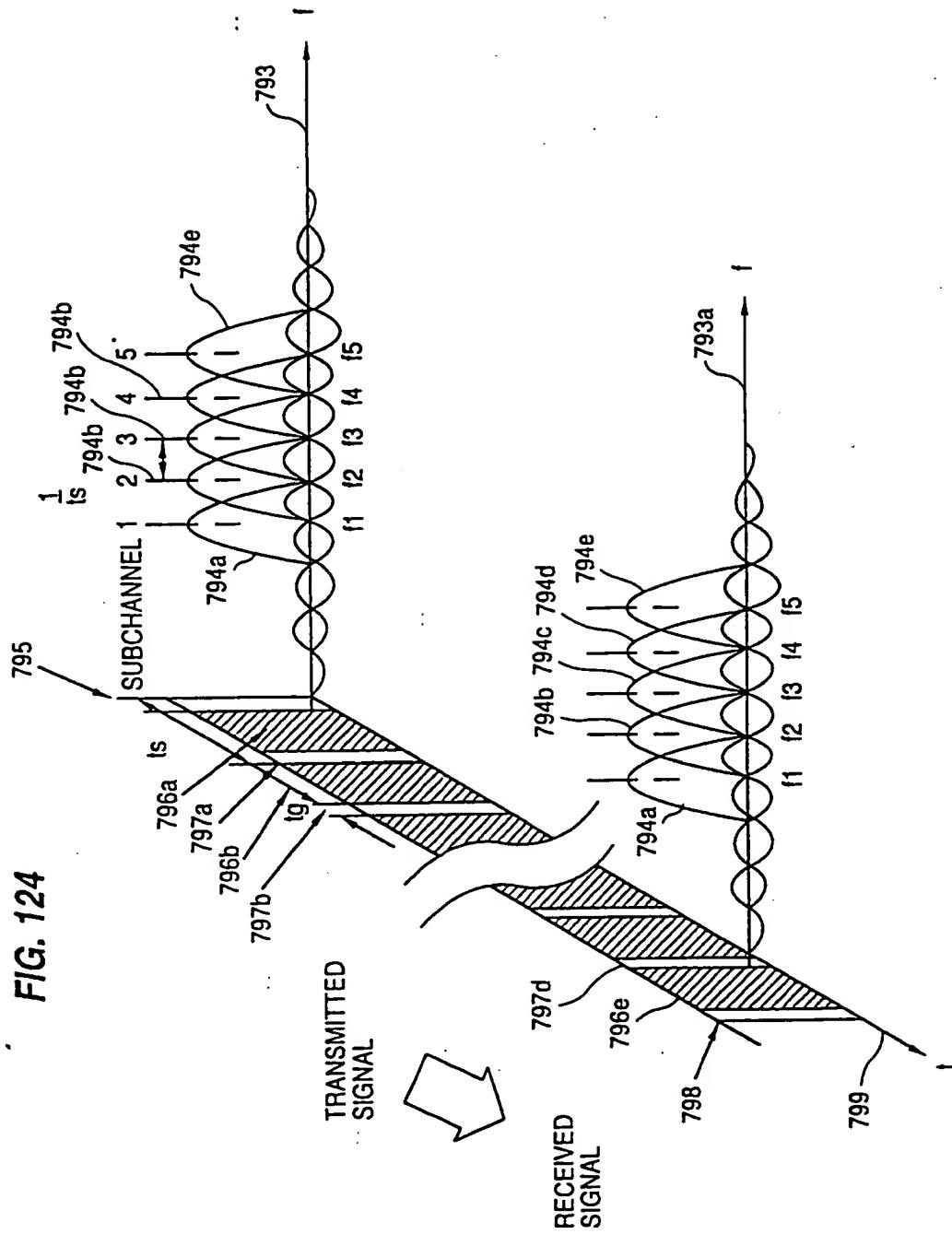
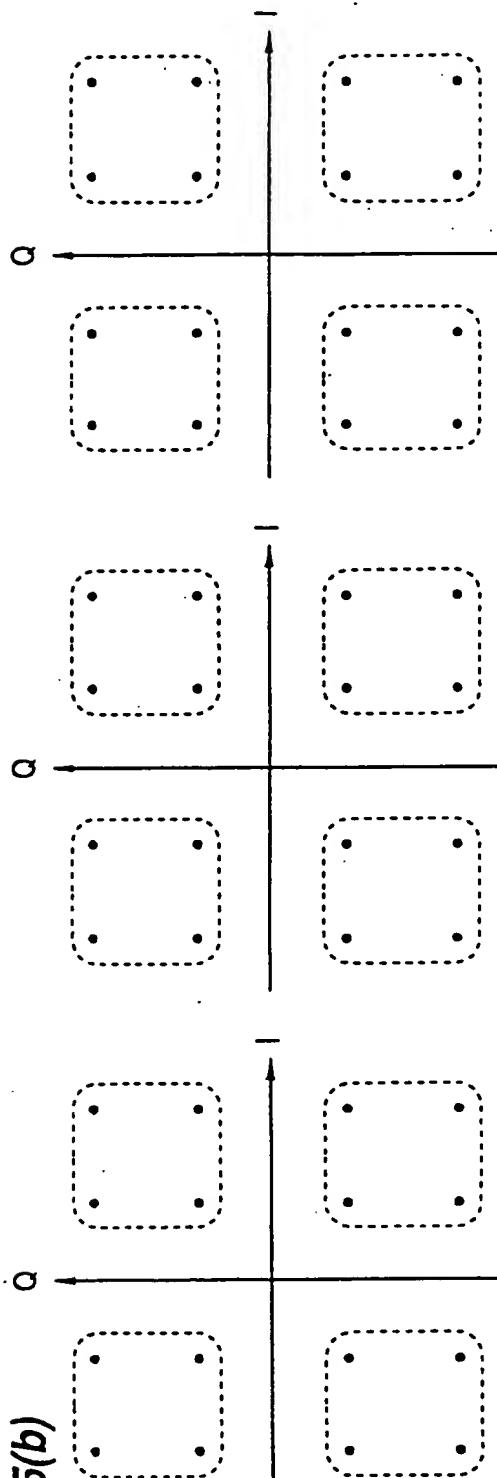
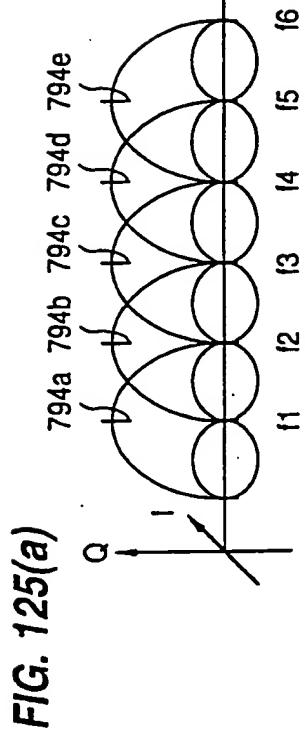


FIG. 123







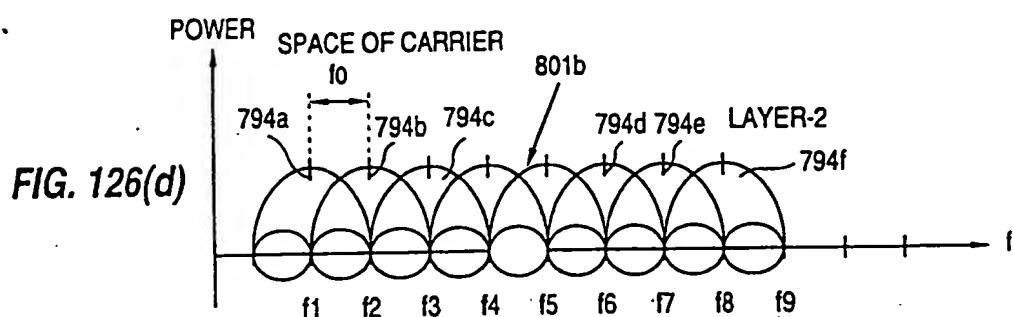
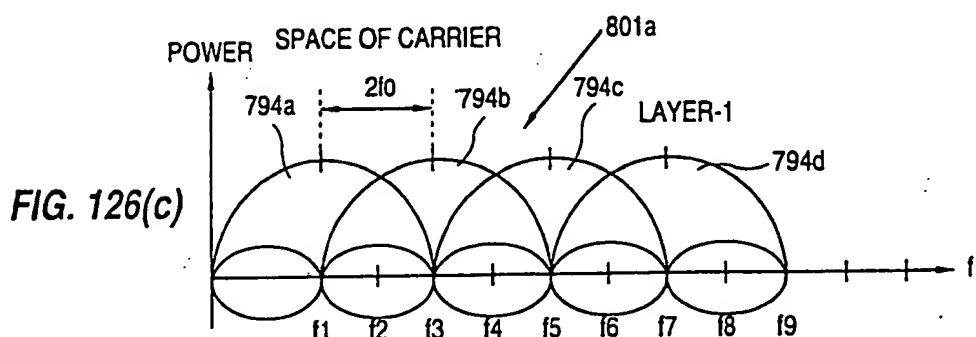
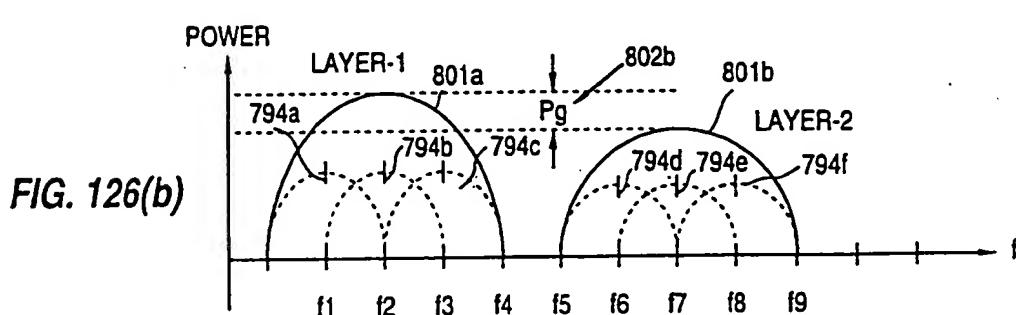
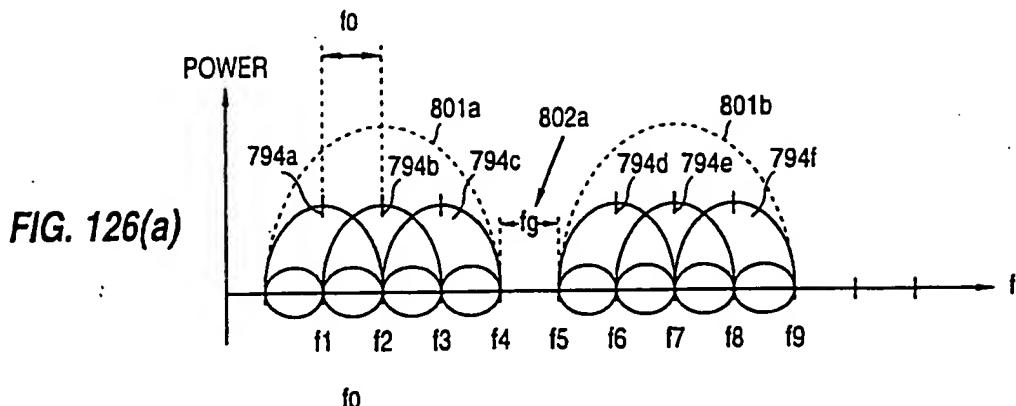


FIG. 127

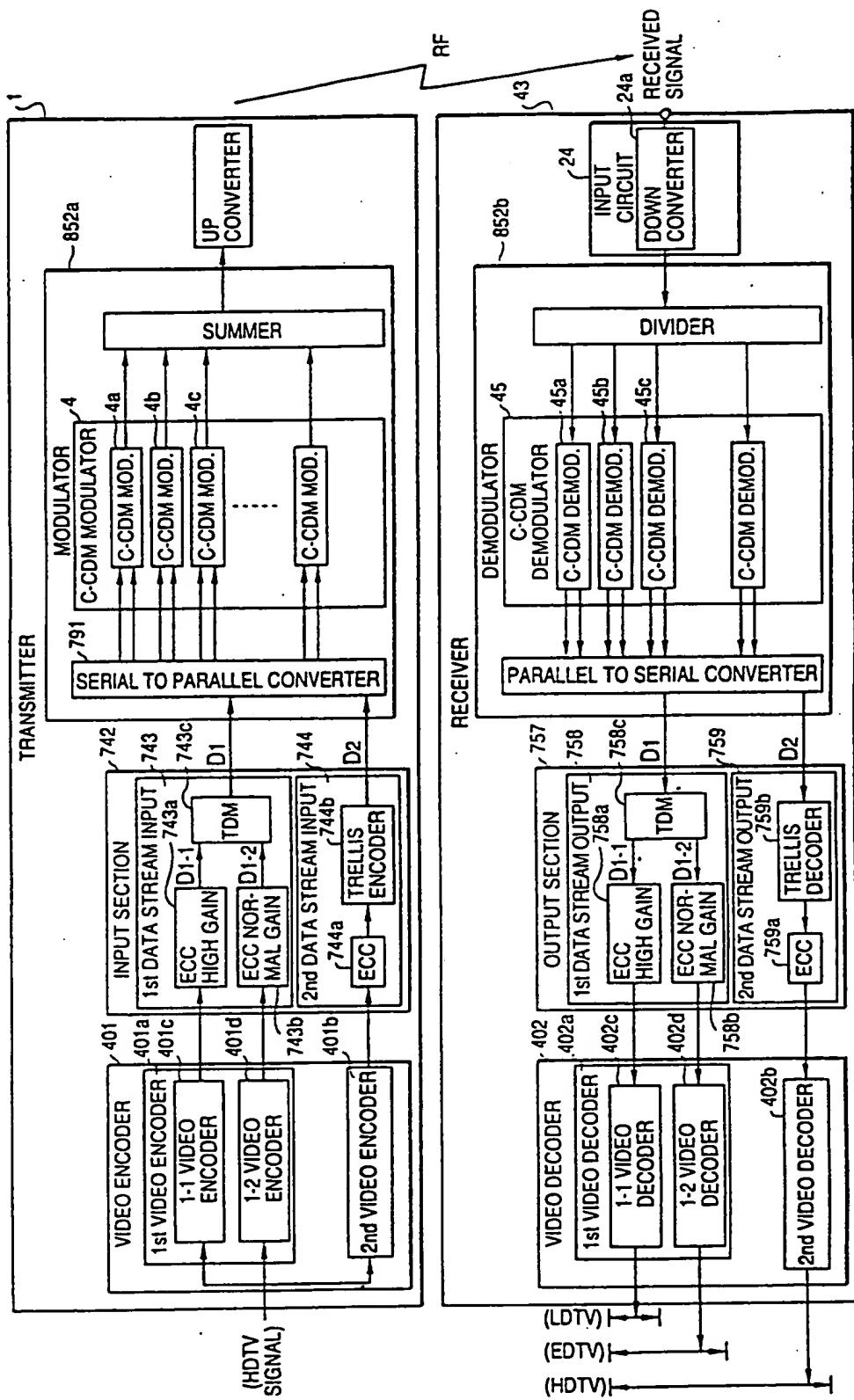


FIG. 128(a)

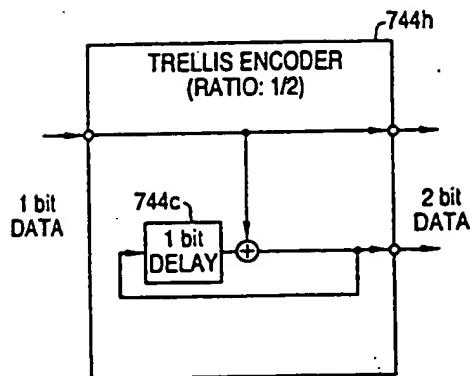


FIG. 128(d)

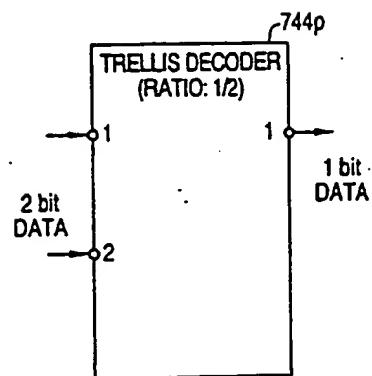


FIG. 128(b)

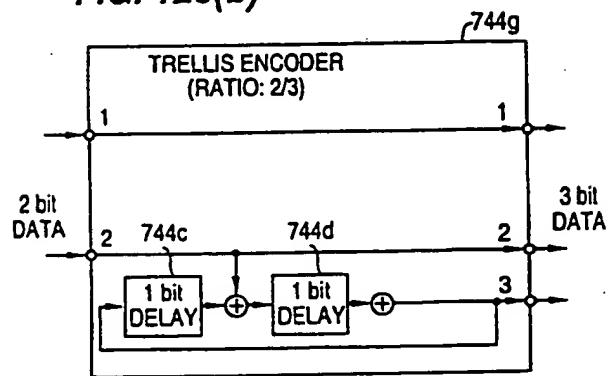


FIG. 128(e)

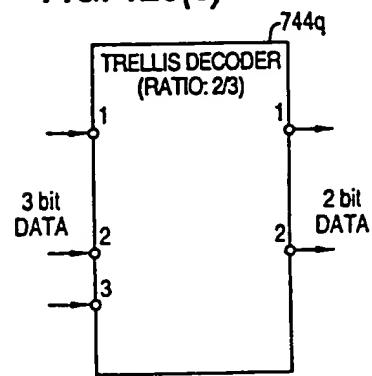


FIG. 128(c)

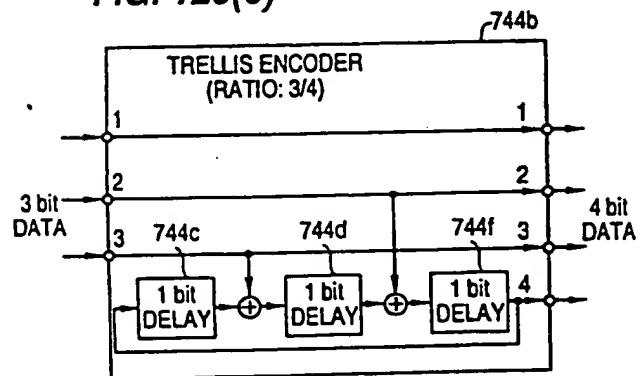


FIG. 128(f)

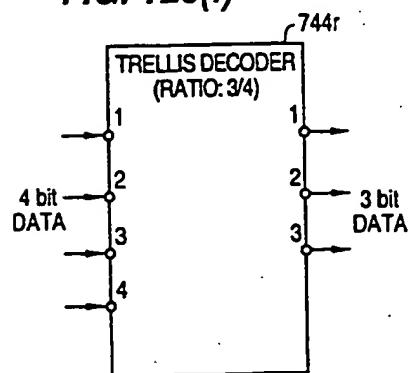


FIG. 129

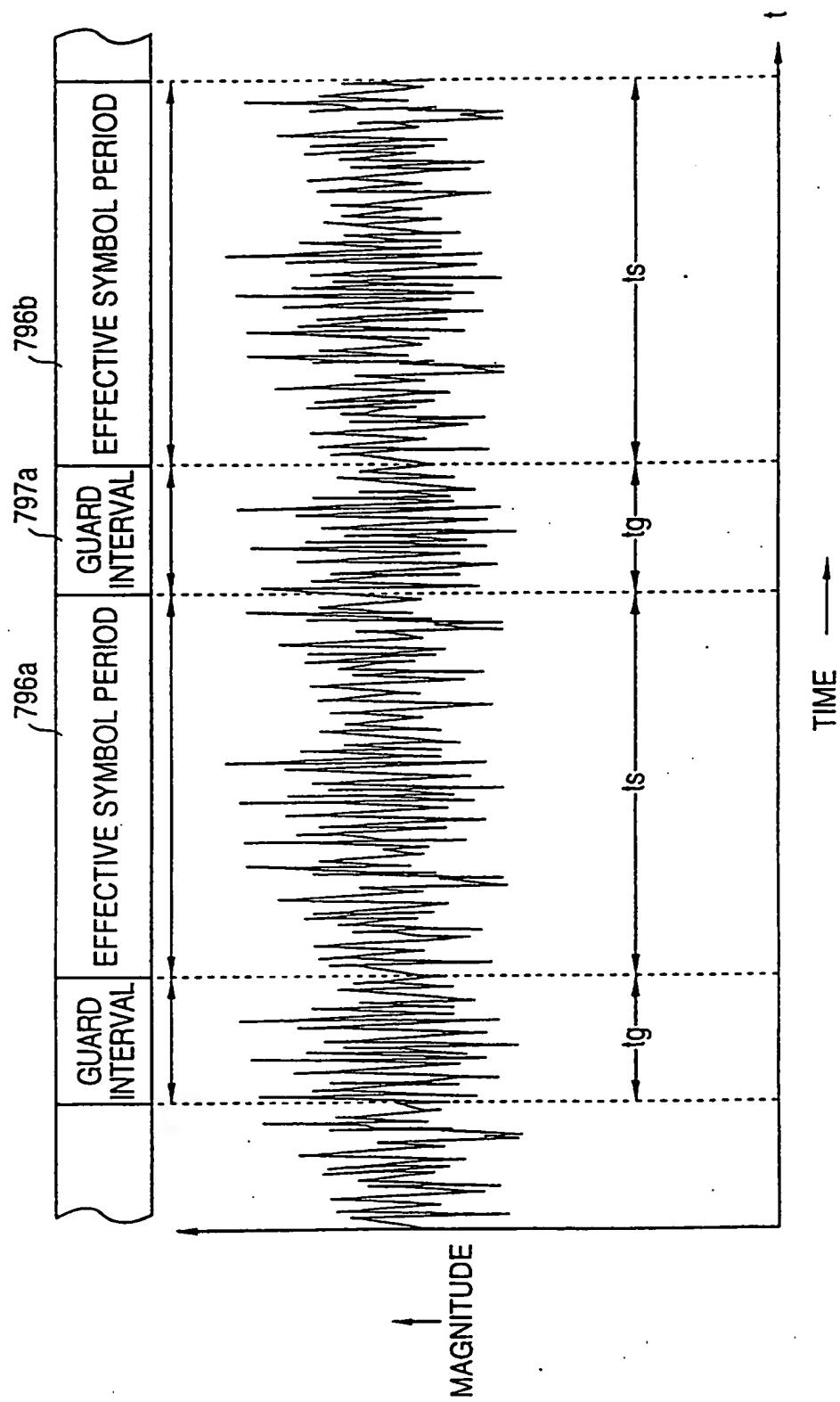


FIG. 130

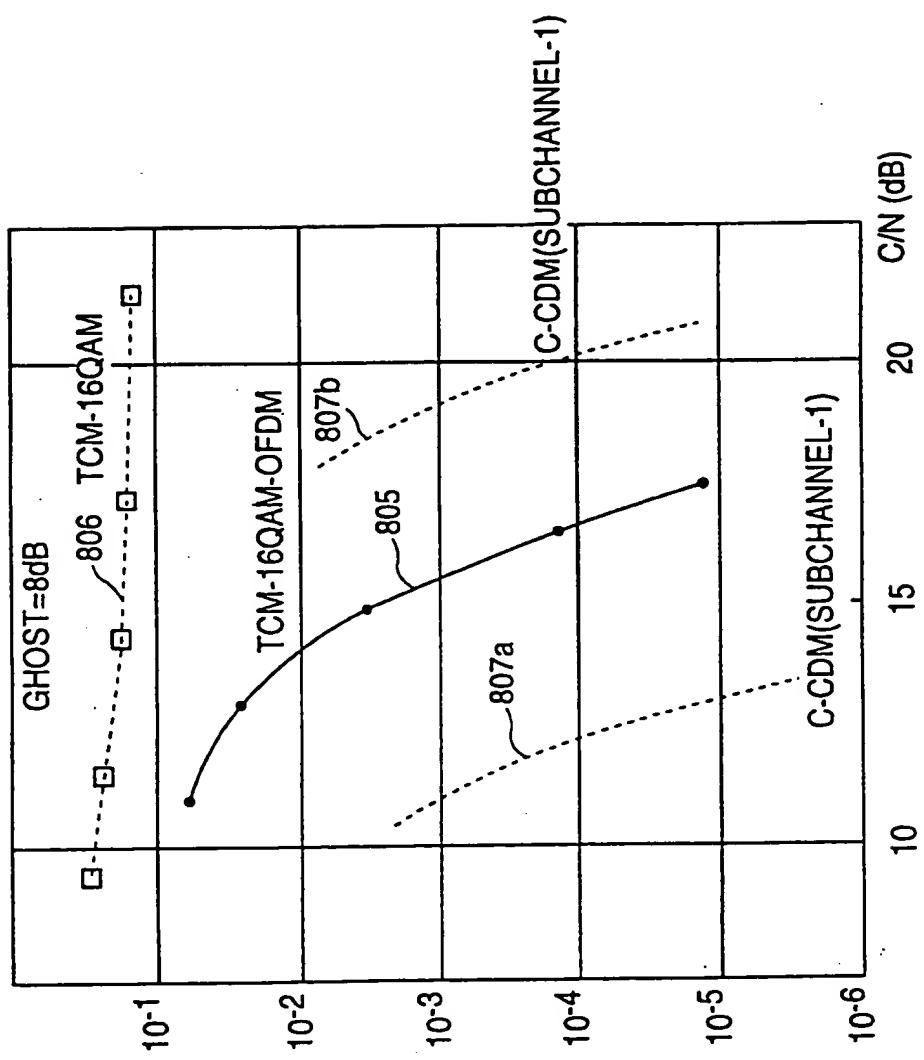


FIG. 131 (Amended)

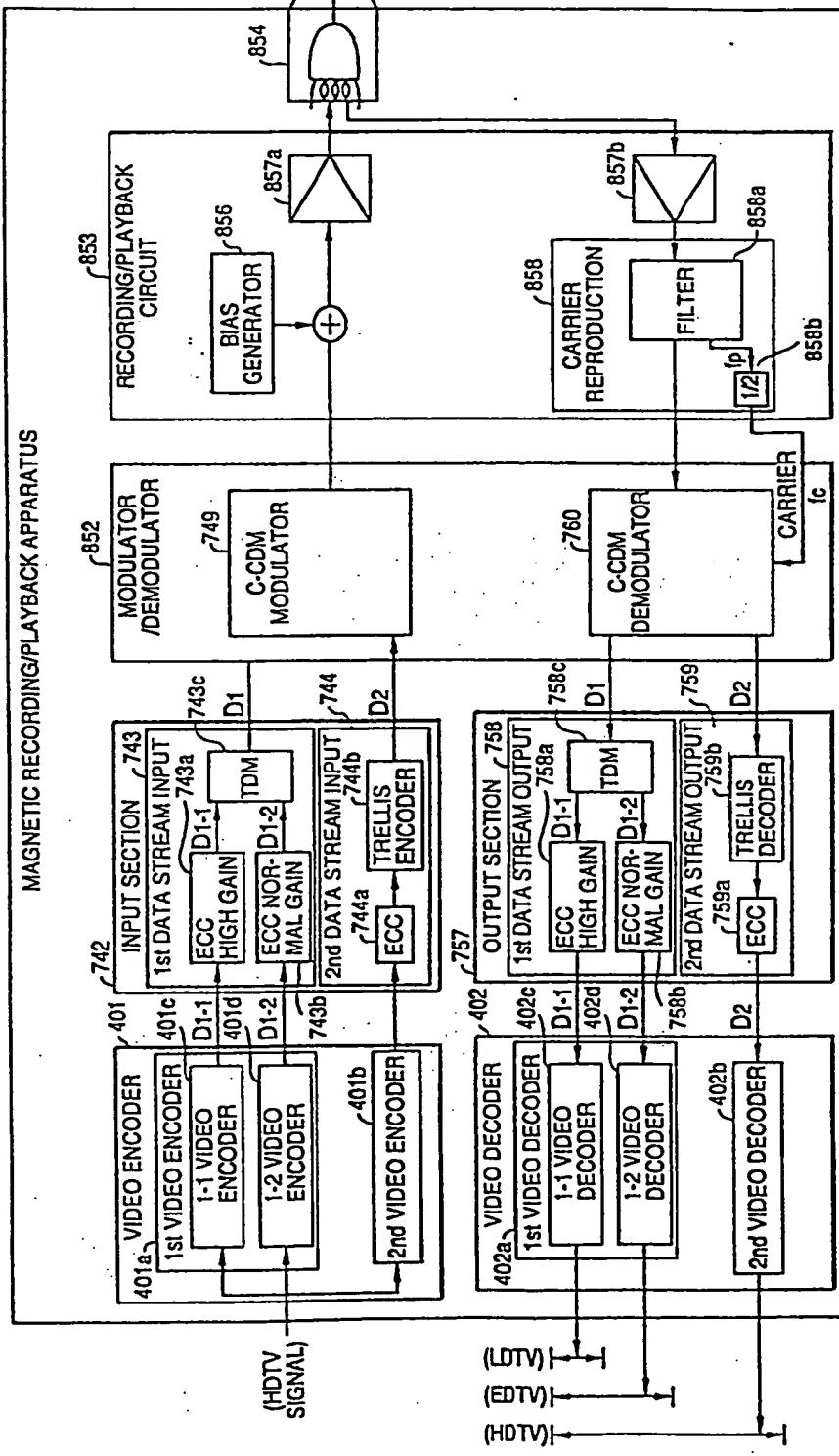


FIG. 132

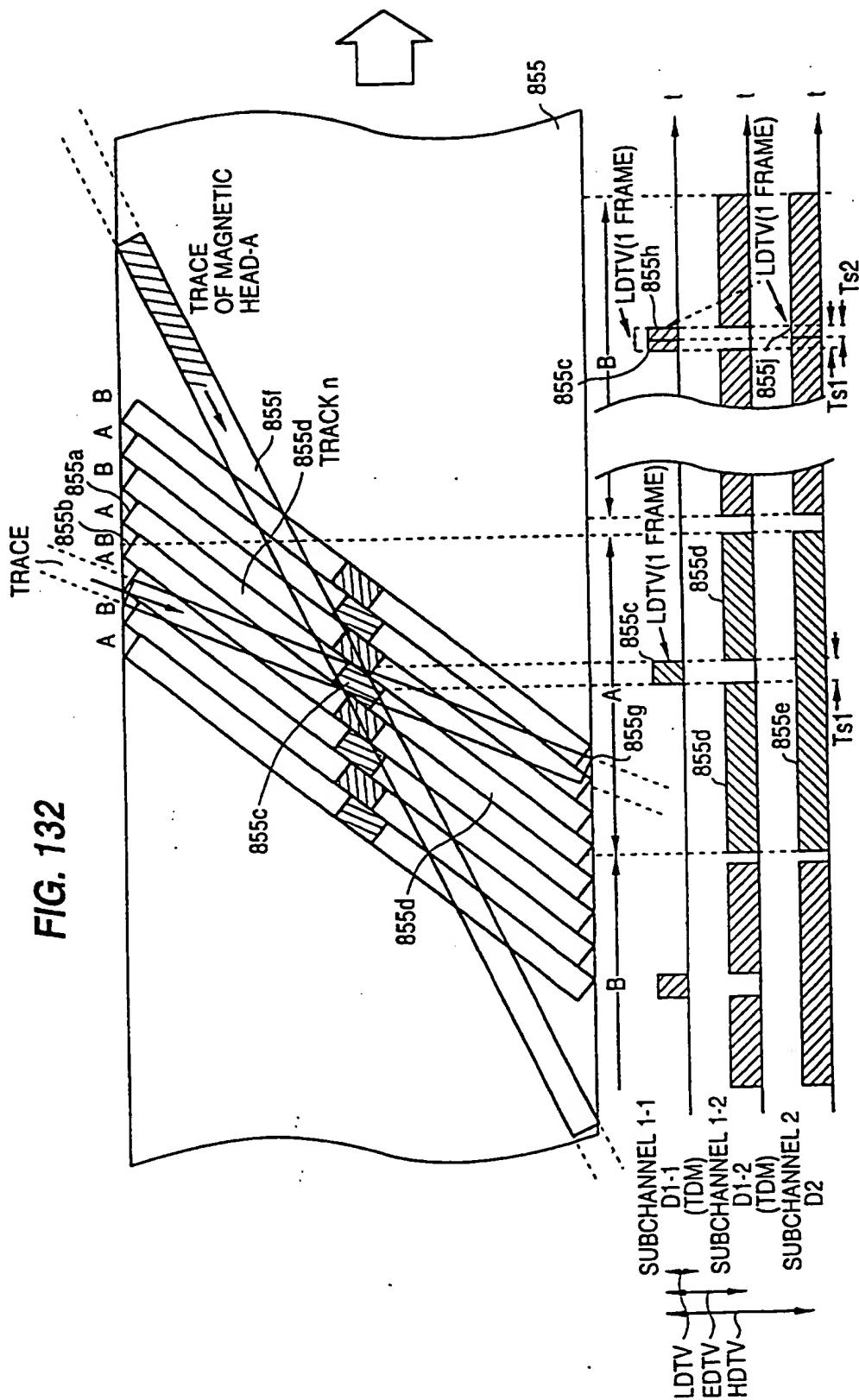


FIG. 133

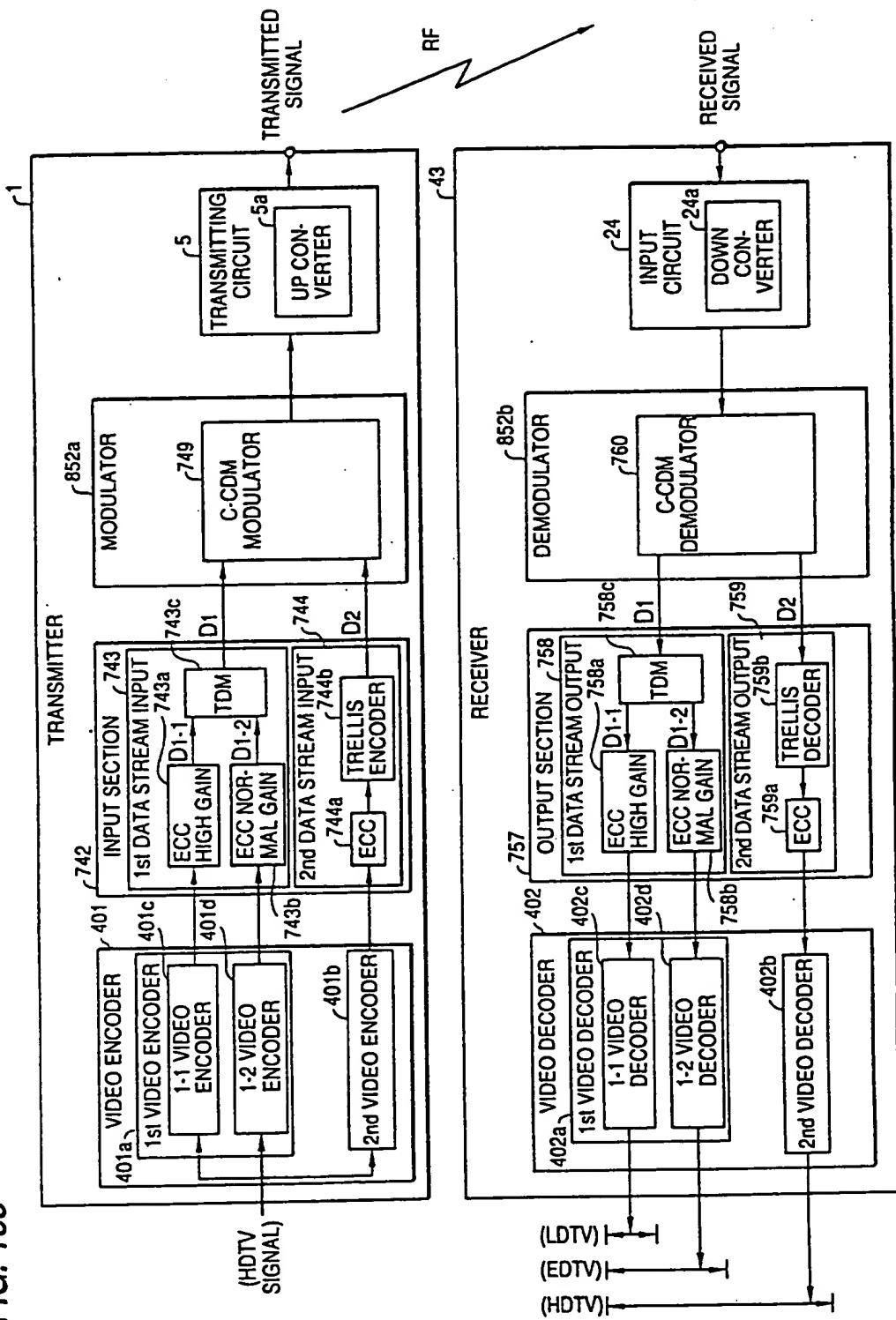


FIG. 134

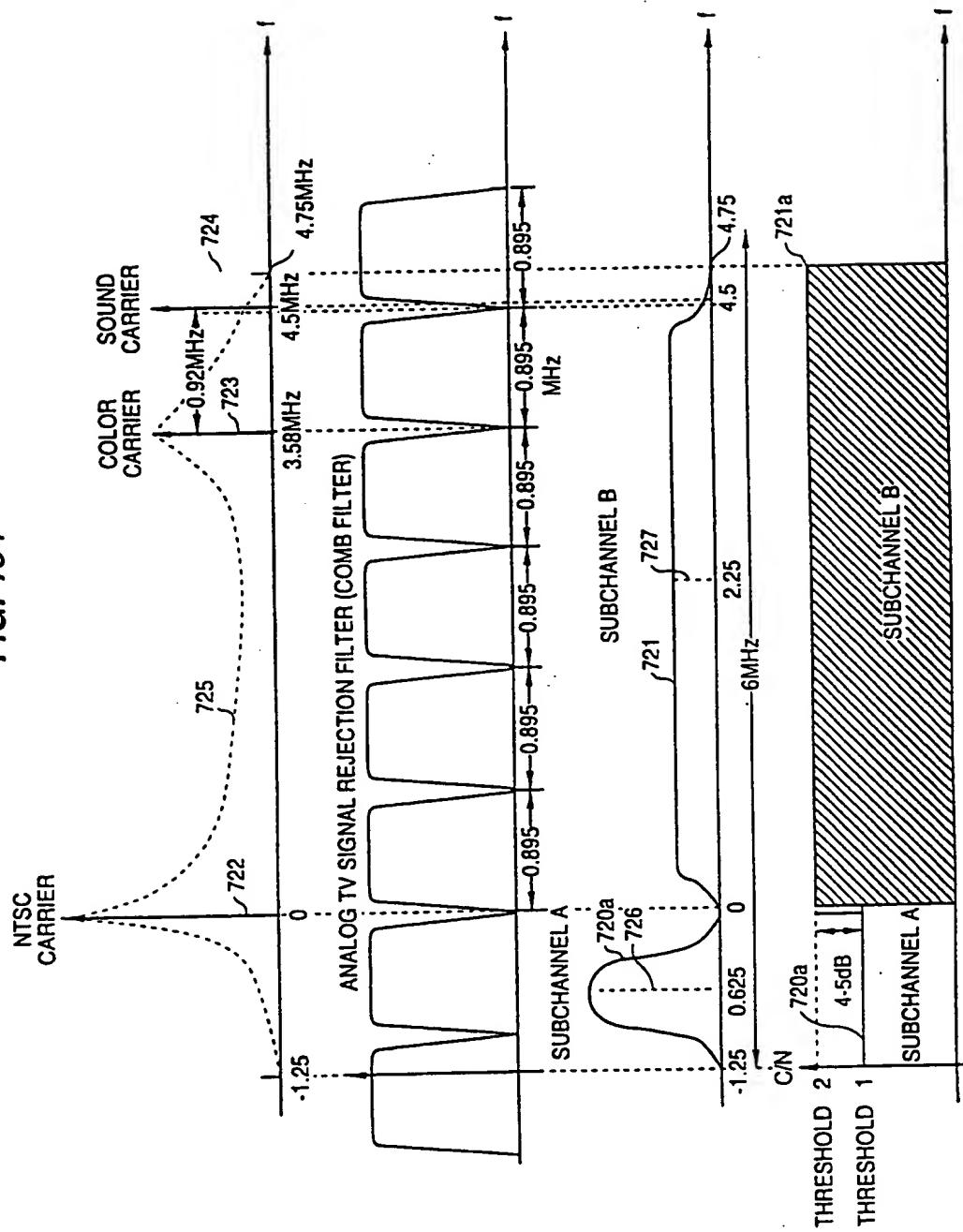


FIG. 135

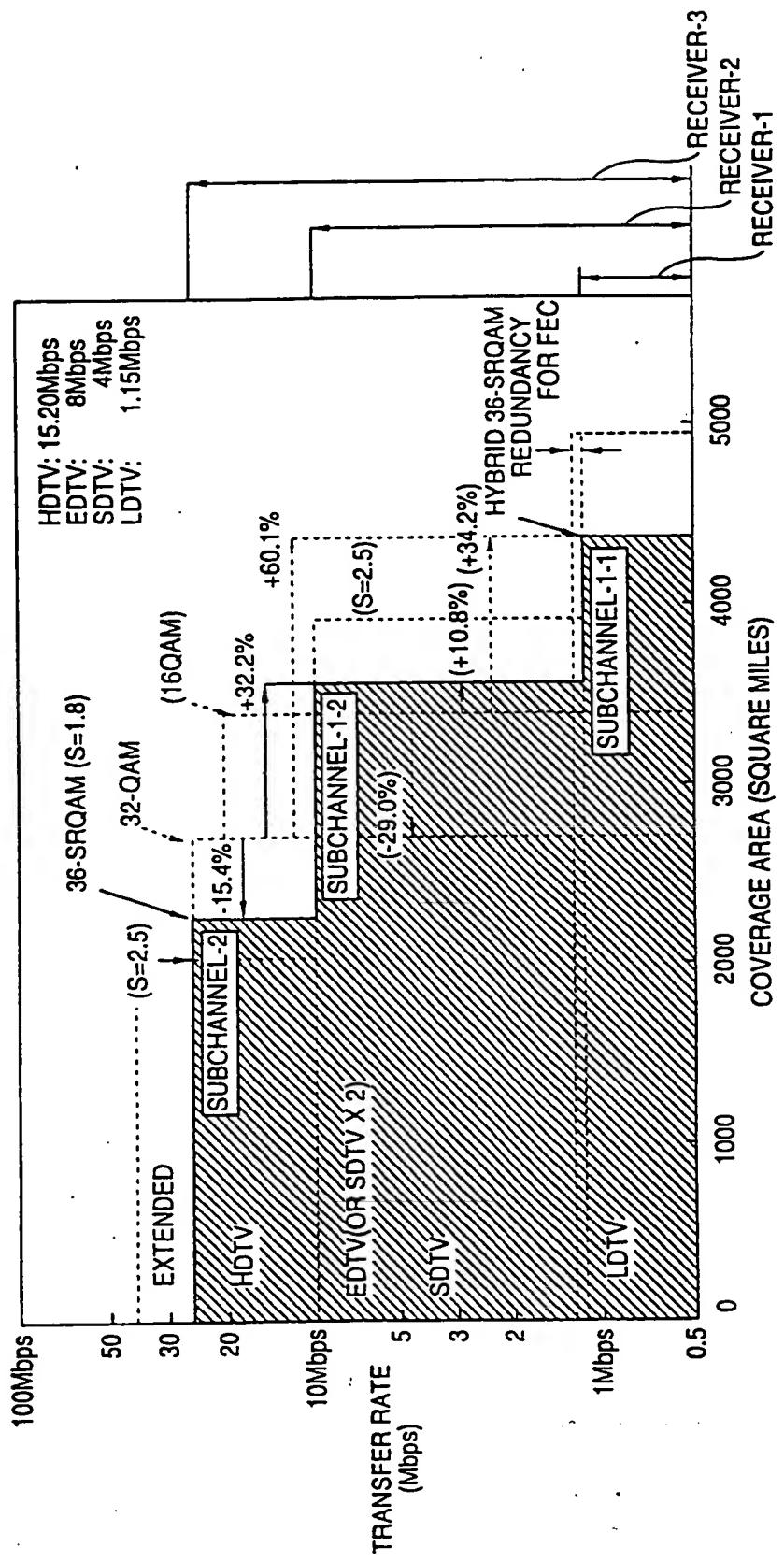
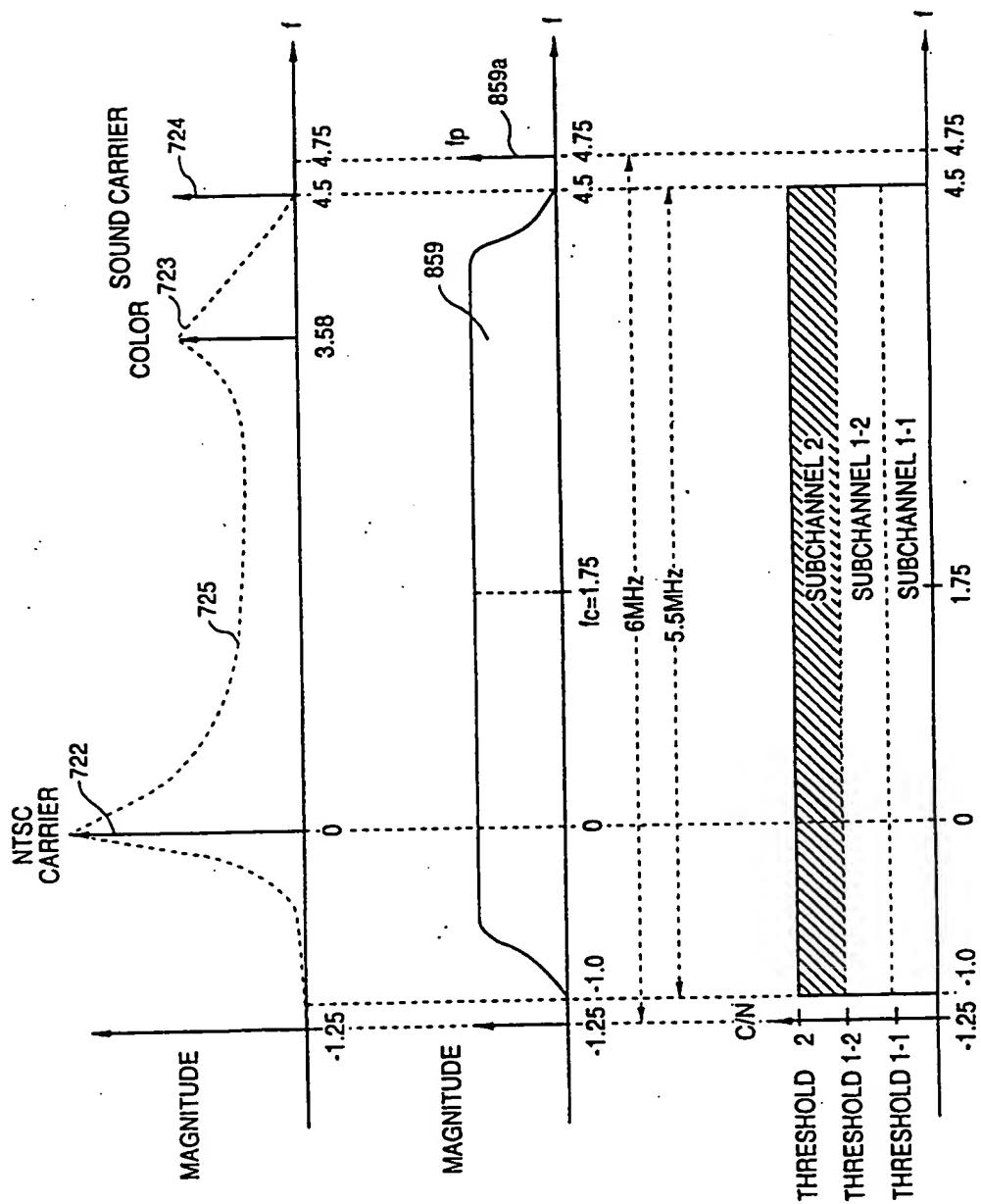


FIG. 136



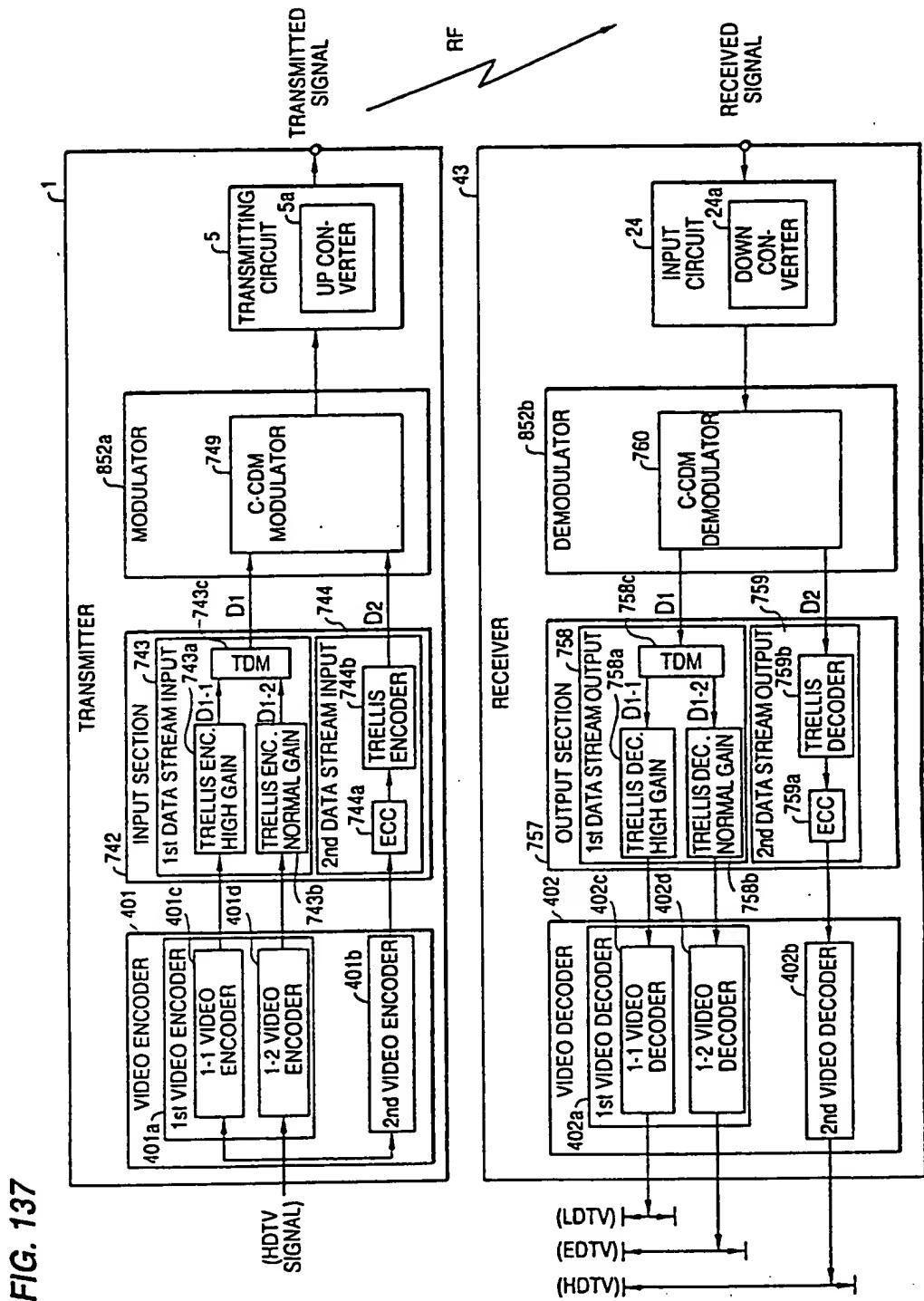


FIG. 138 (Amended)

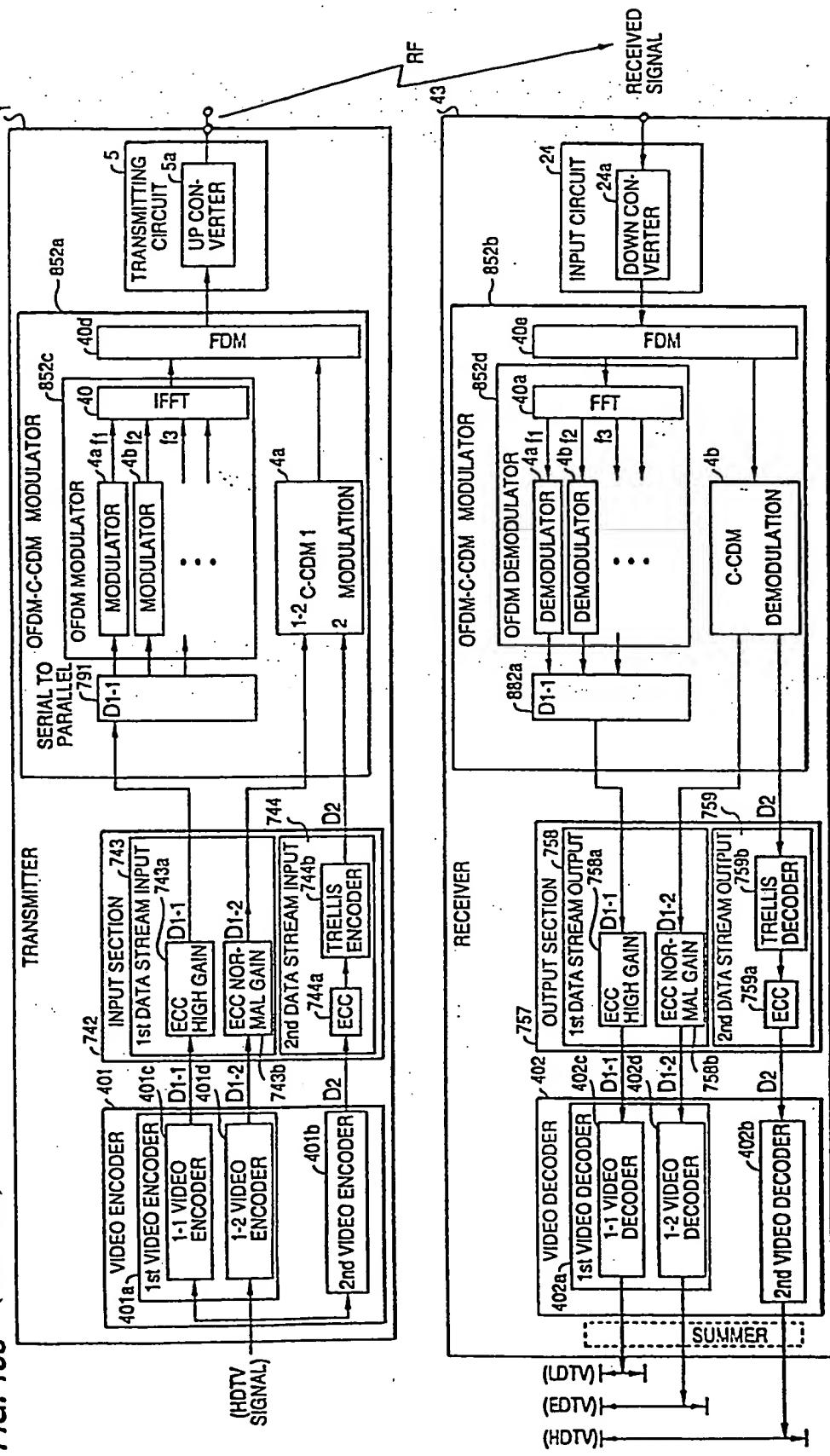


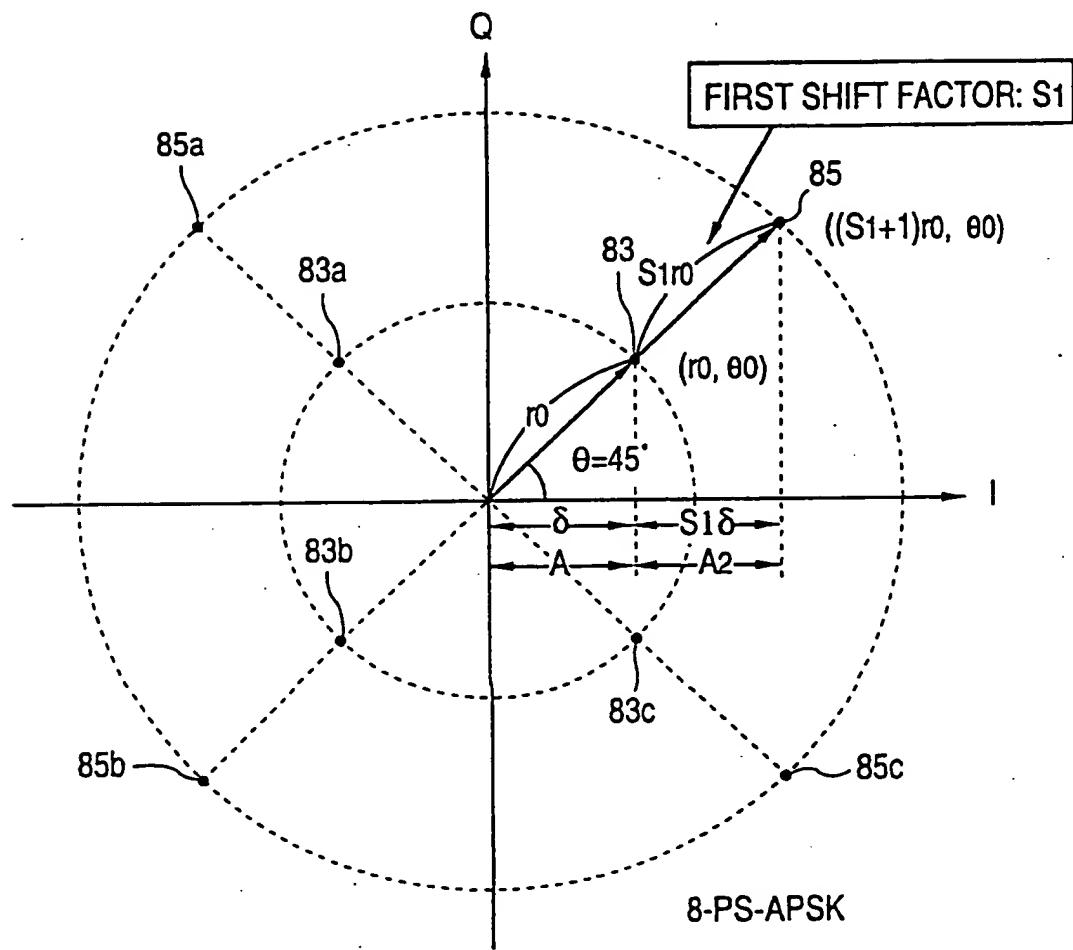
FIG. 139

FIG. 140

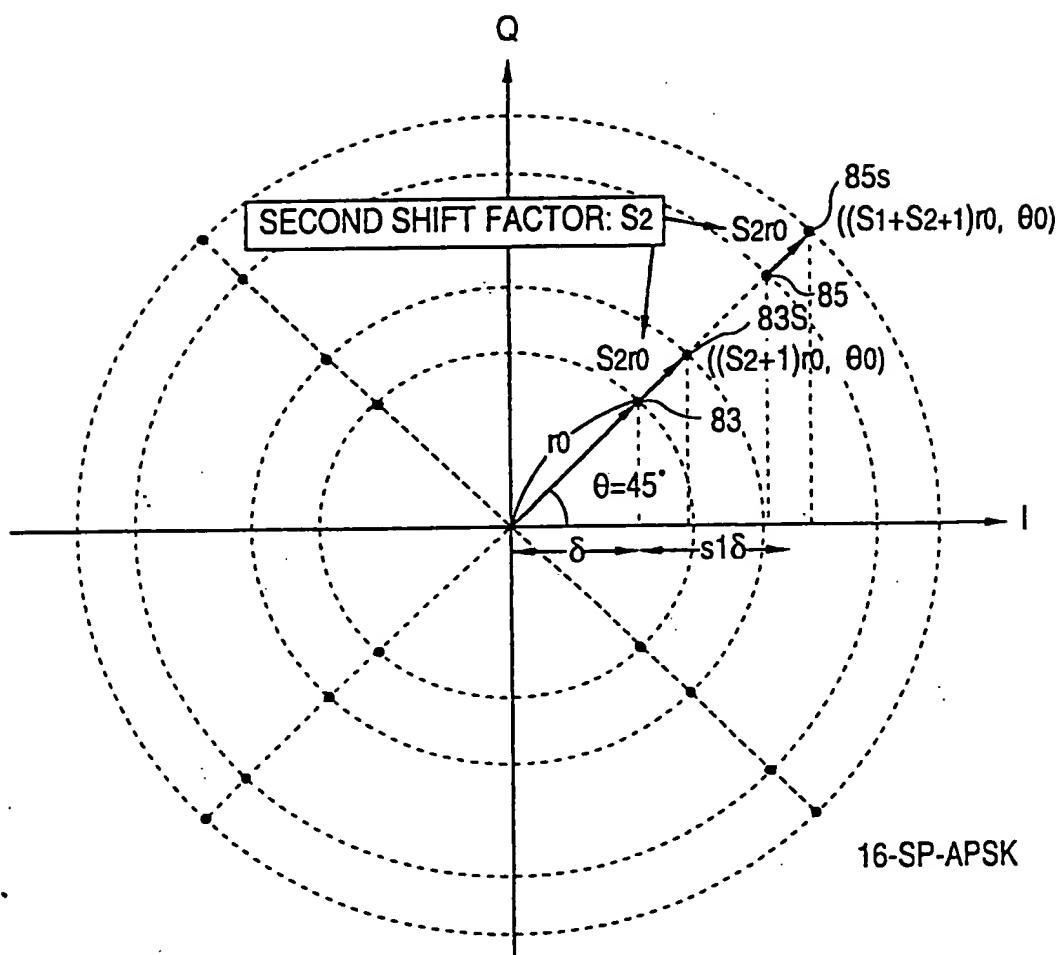


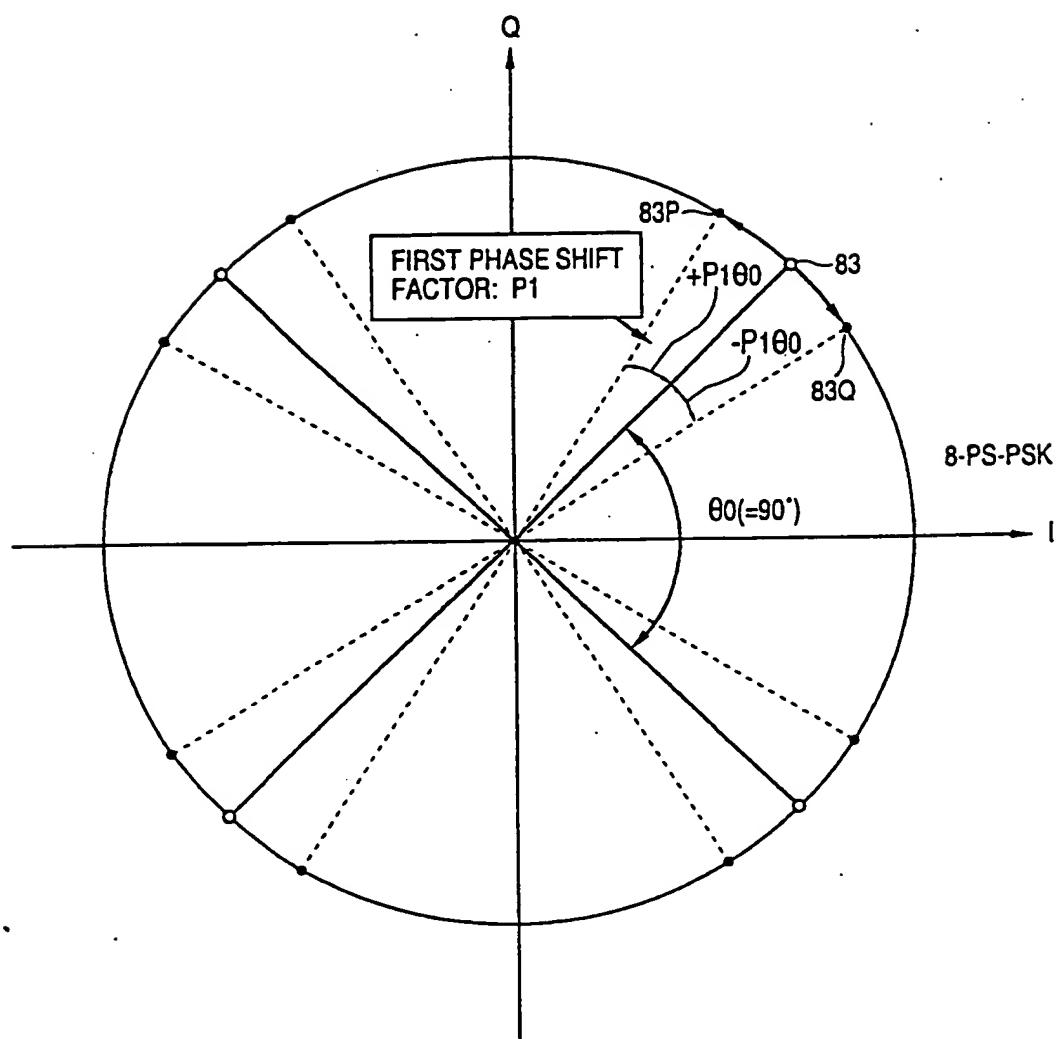
FIG. 141

FIG. 142

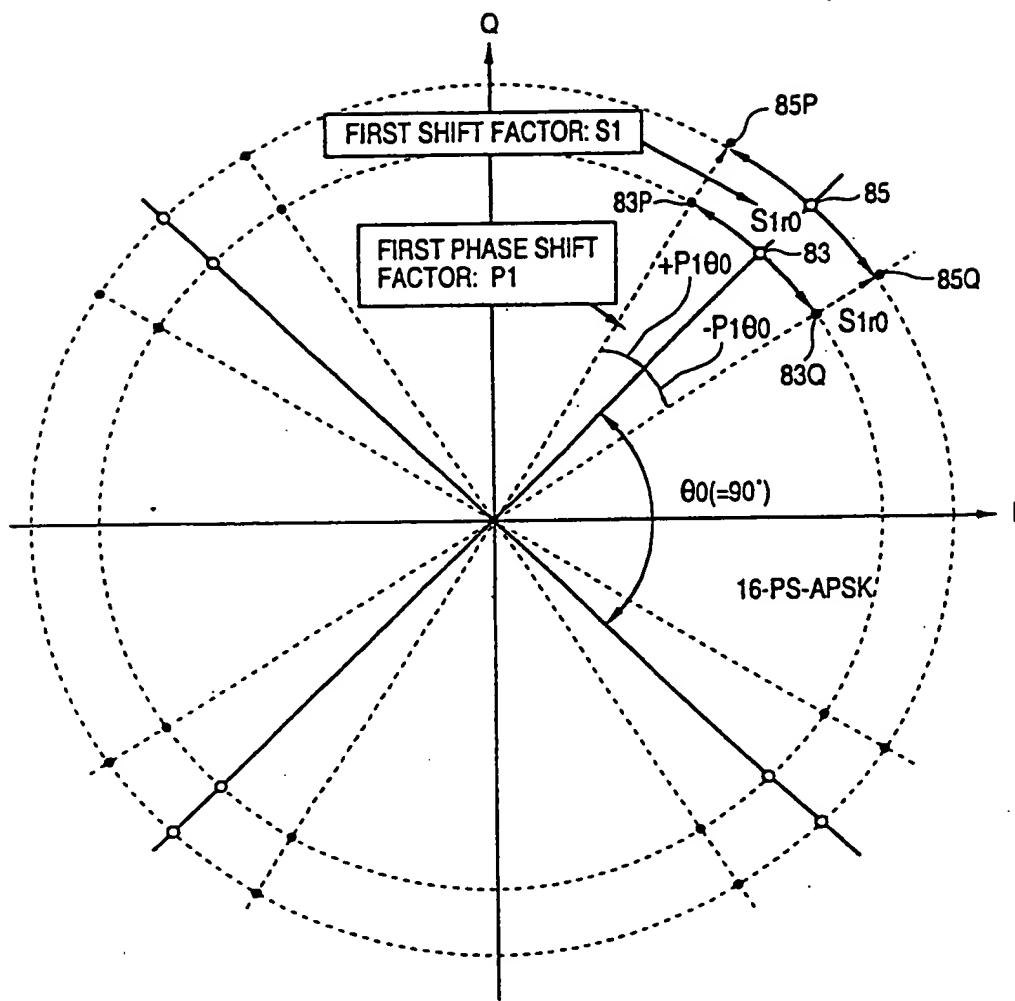


FIG. 143

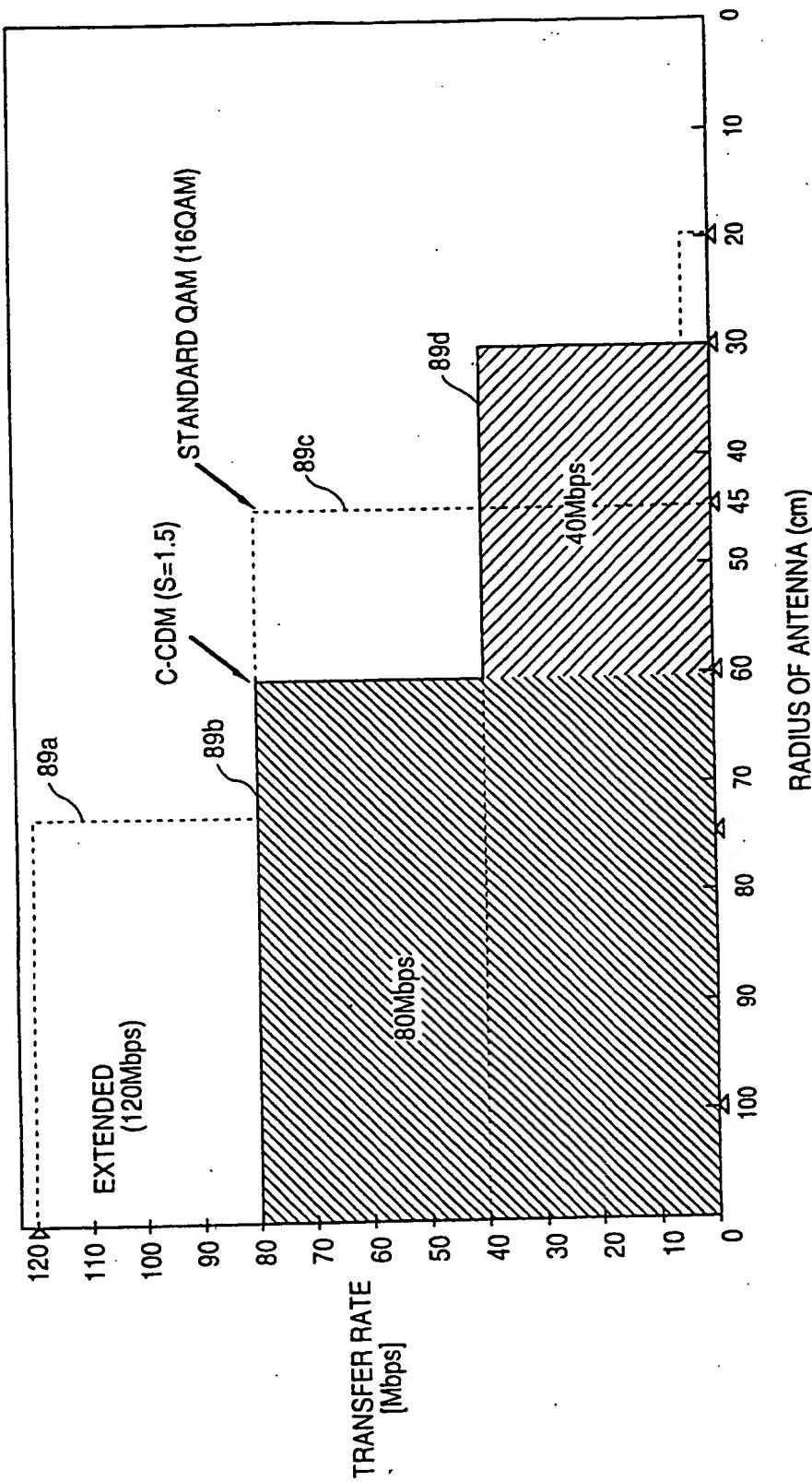


FIG. 144 (Amended)

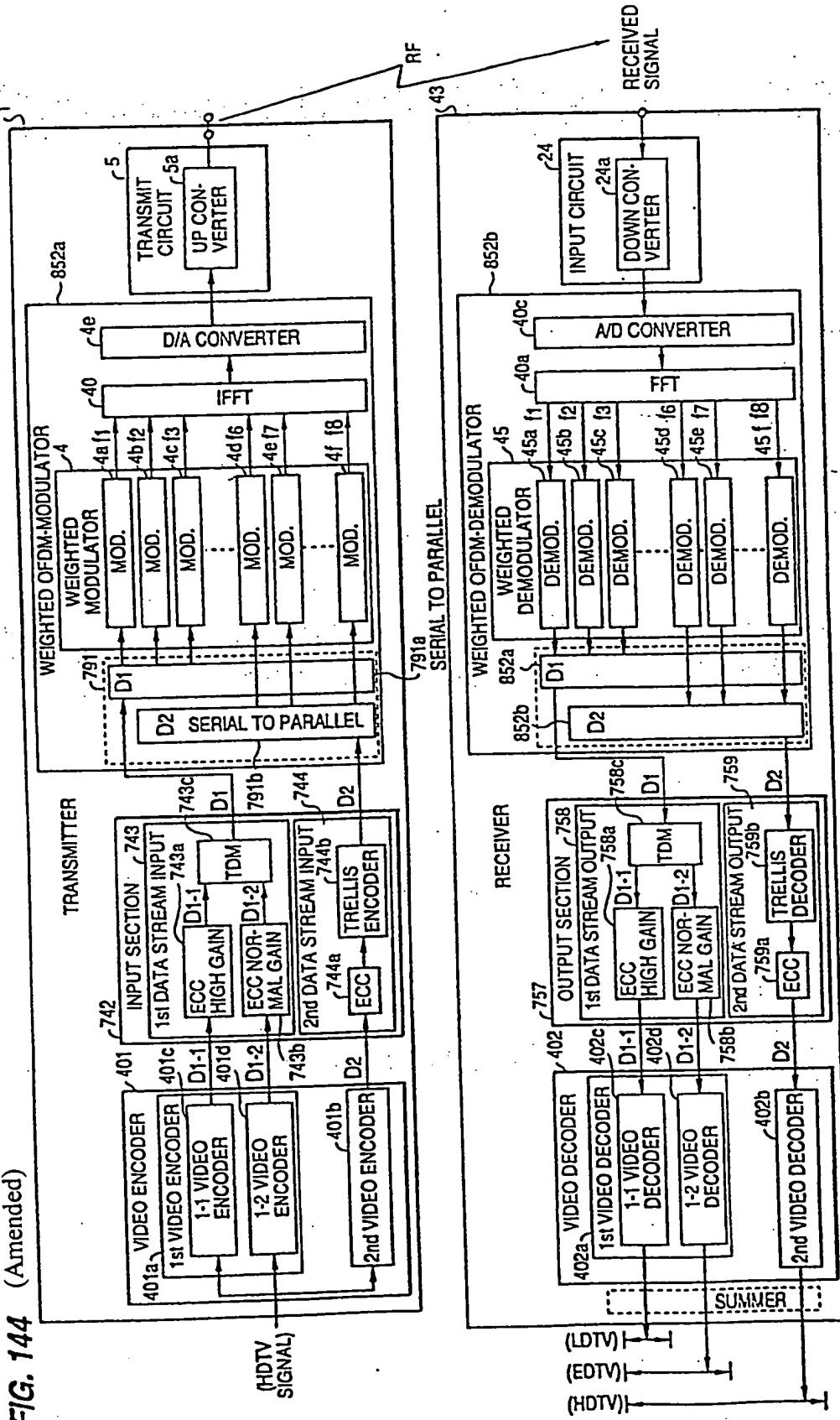
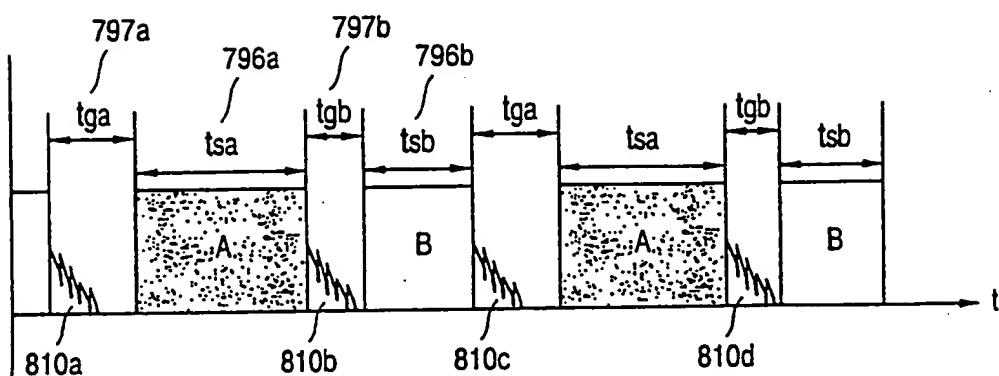
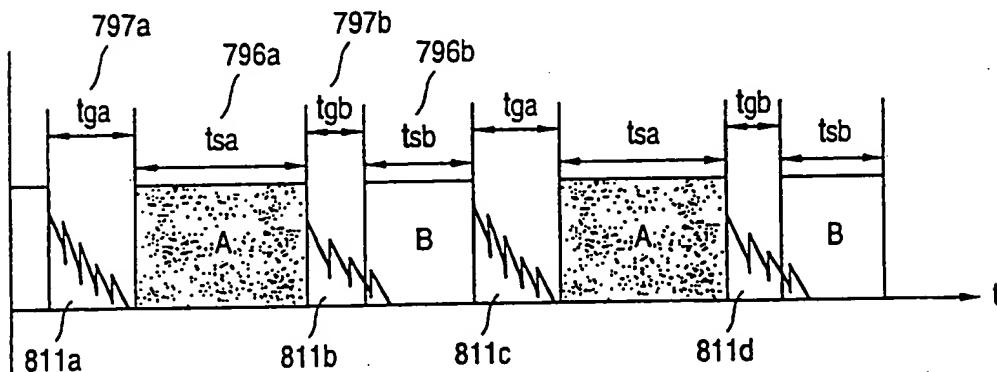


FIG. 145(a)*FIG. 145(b)*

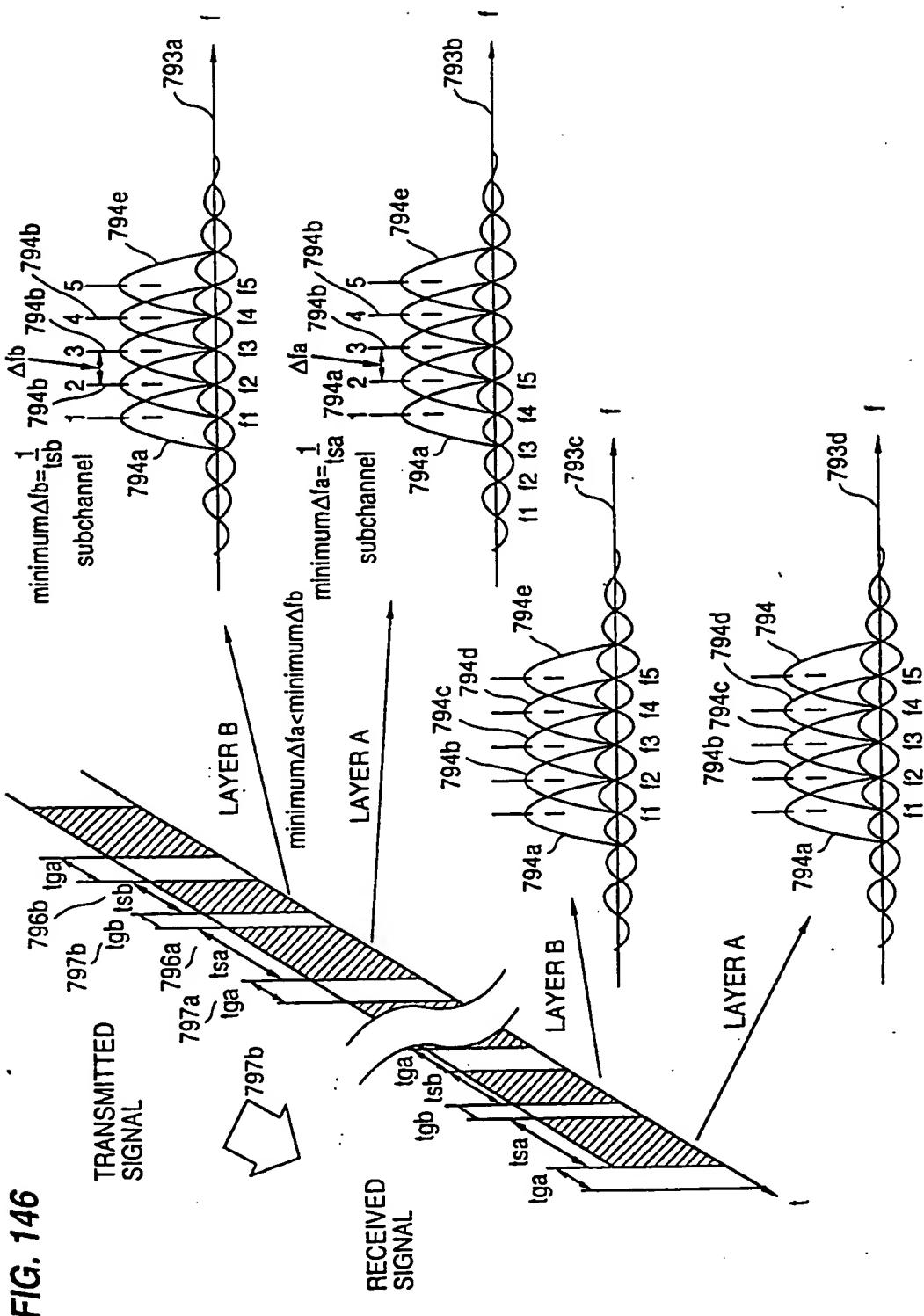


FIG. 147

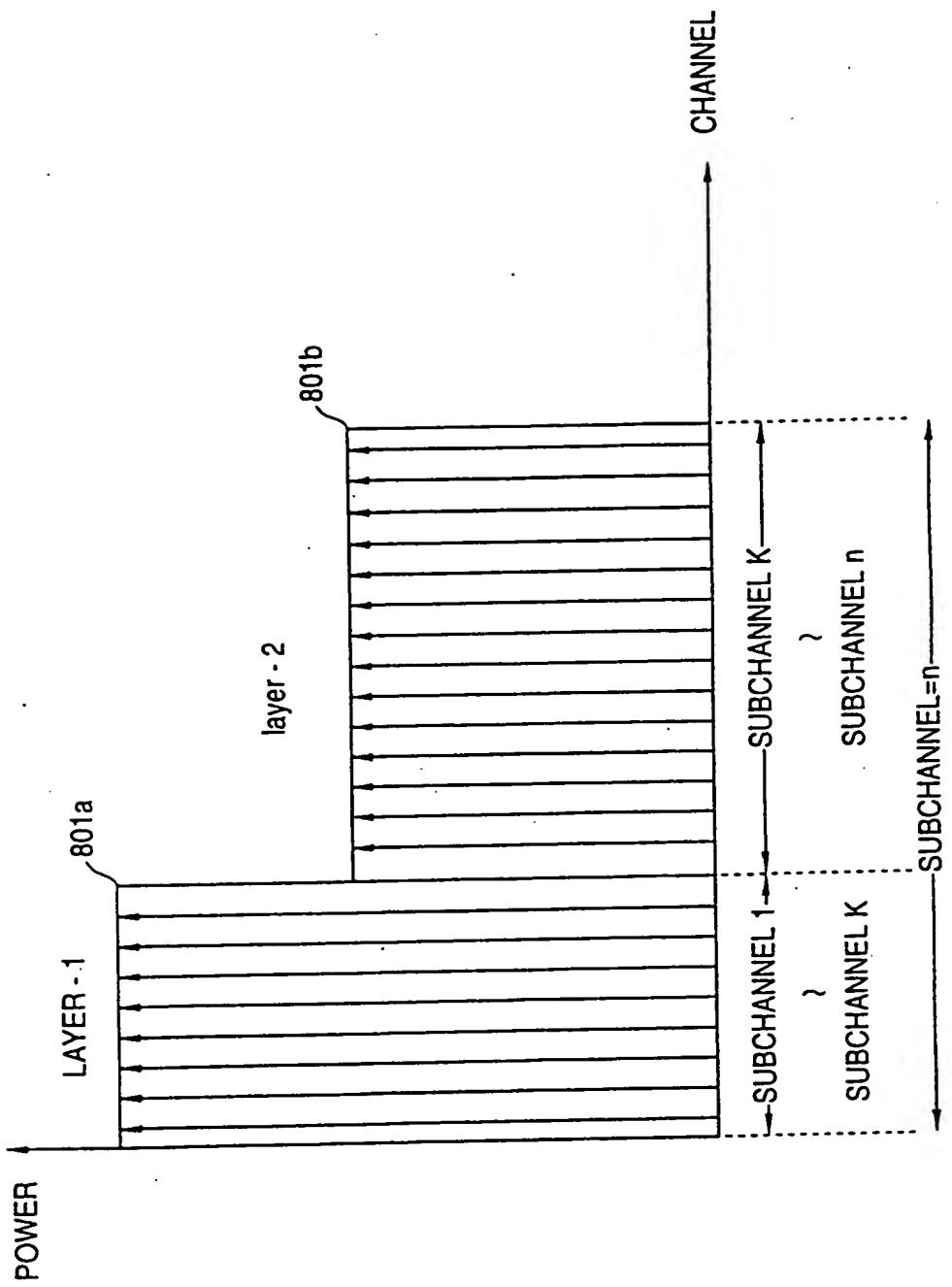
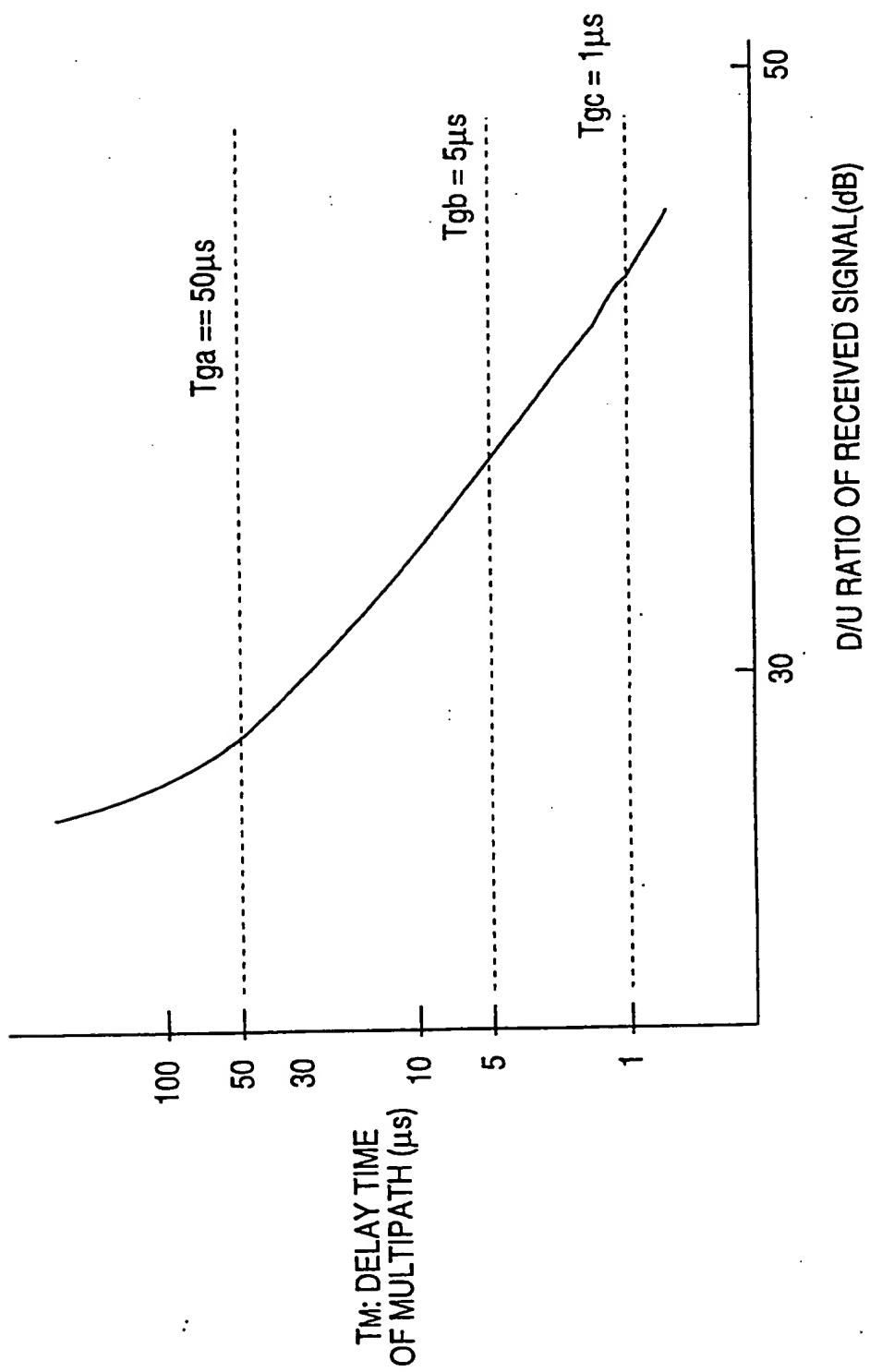


FIG. 148



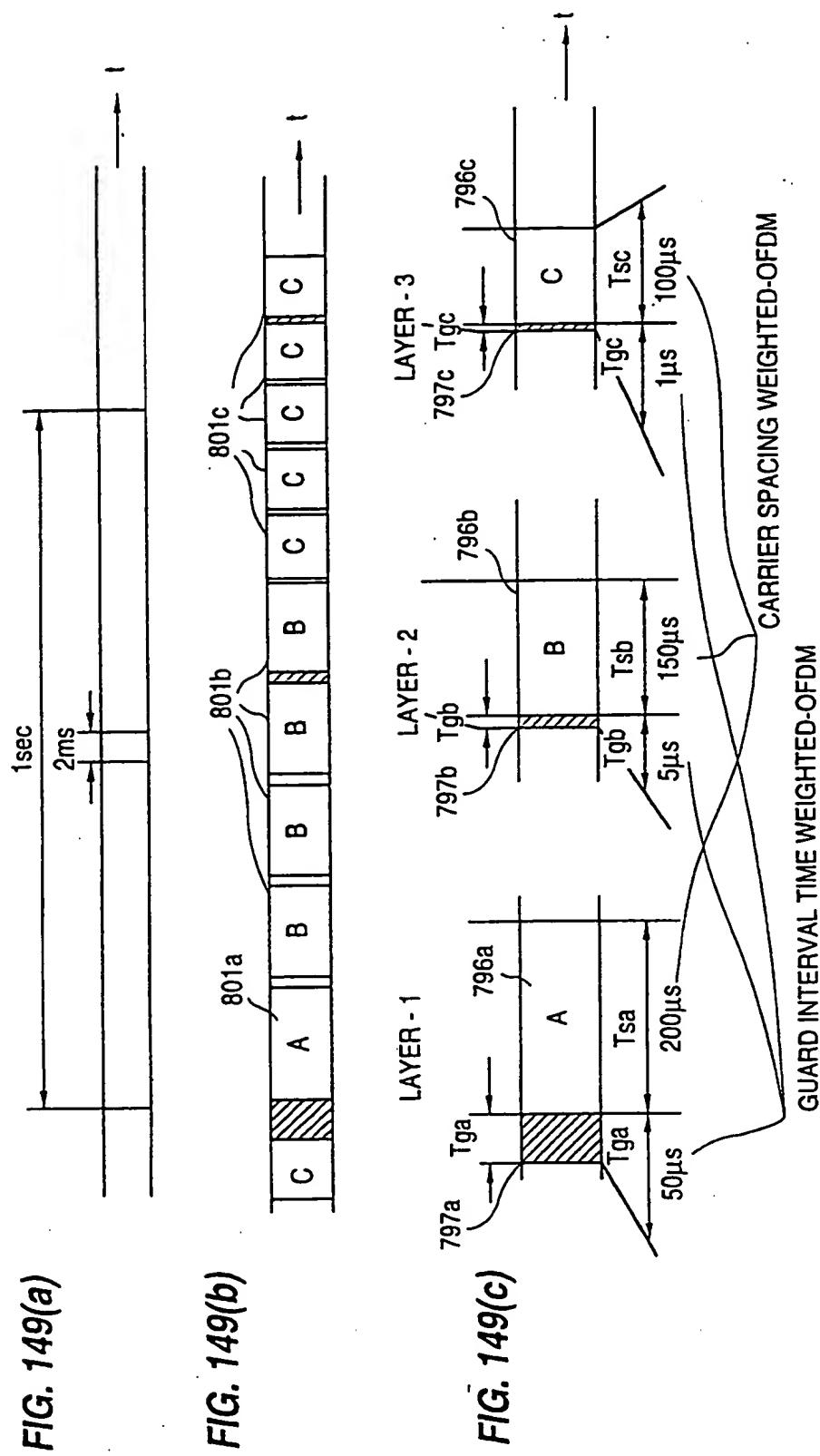


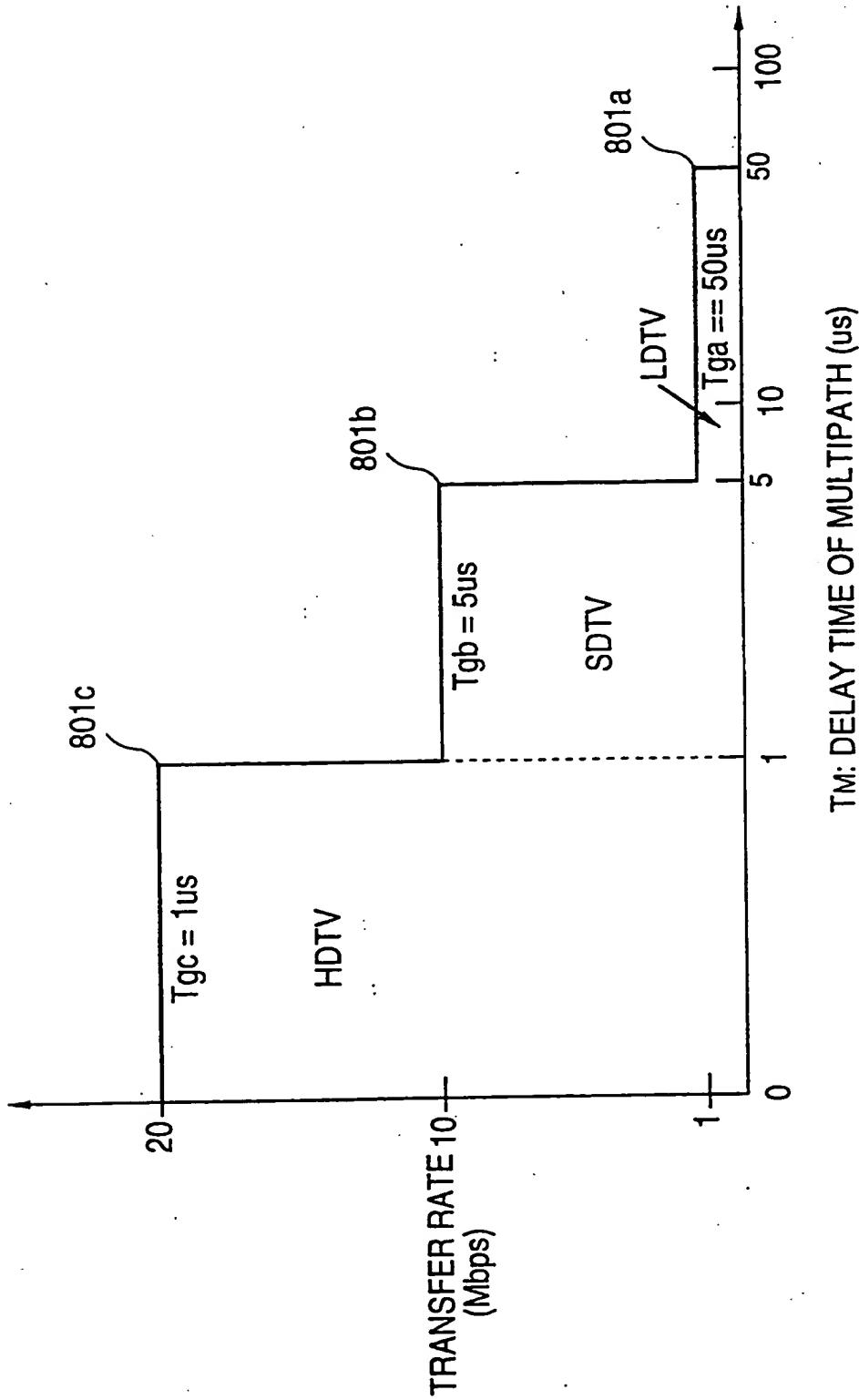
FIG. 150

FIG. 151

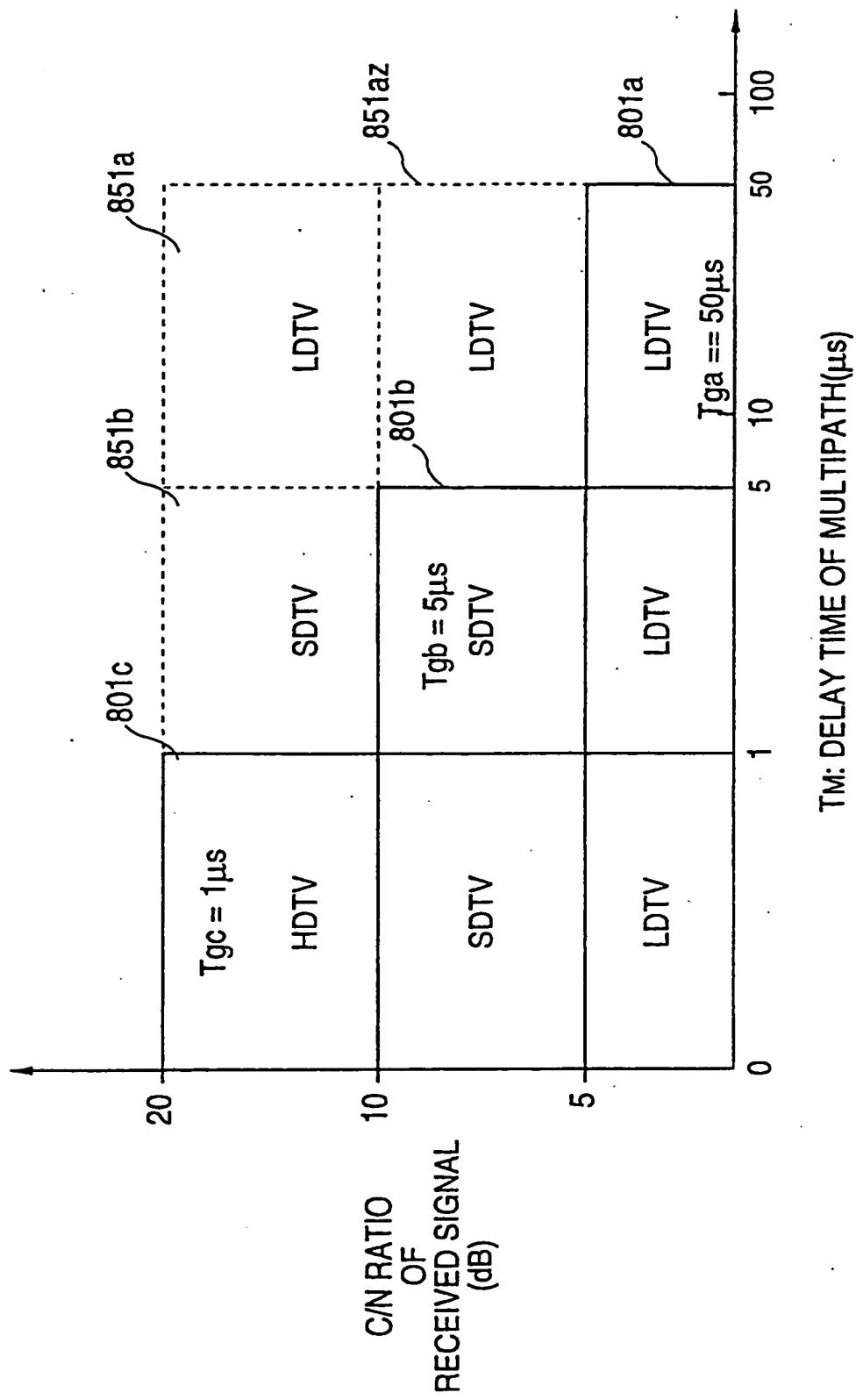


FIG. 152

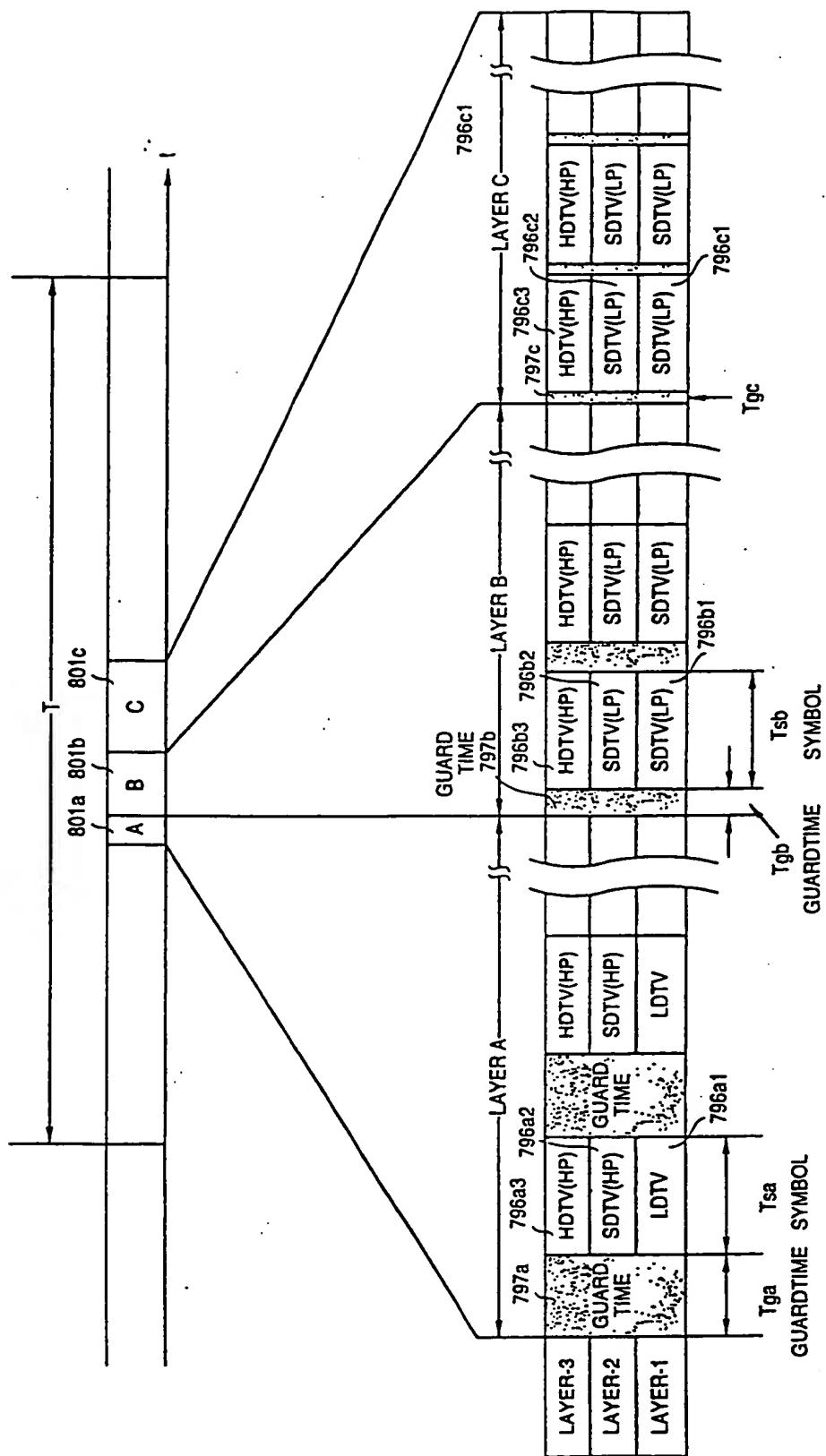
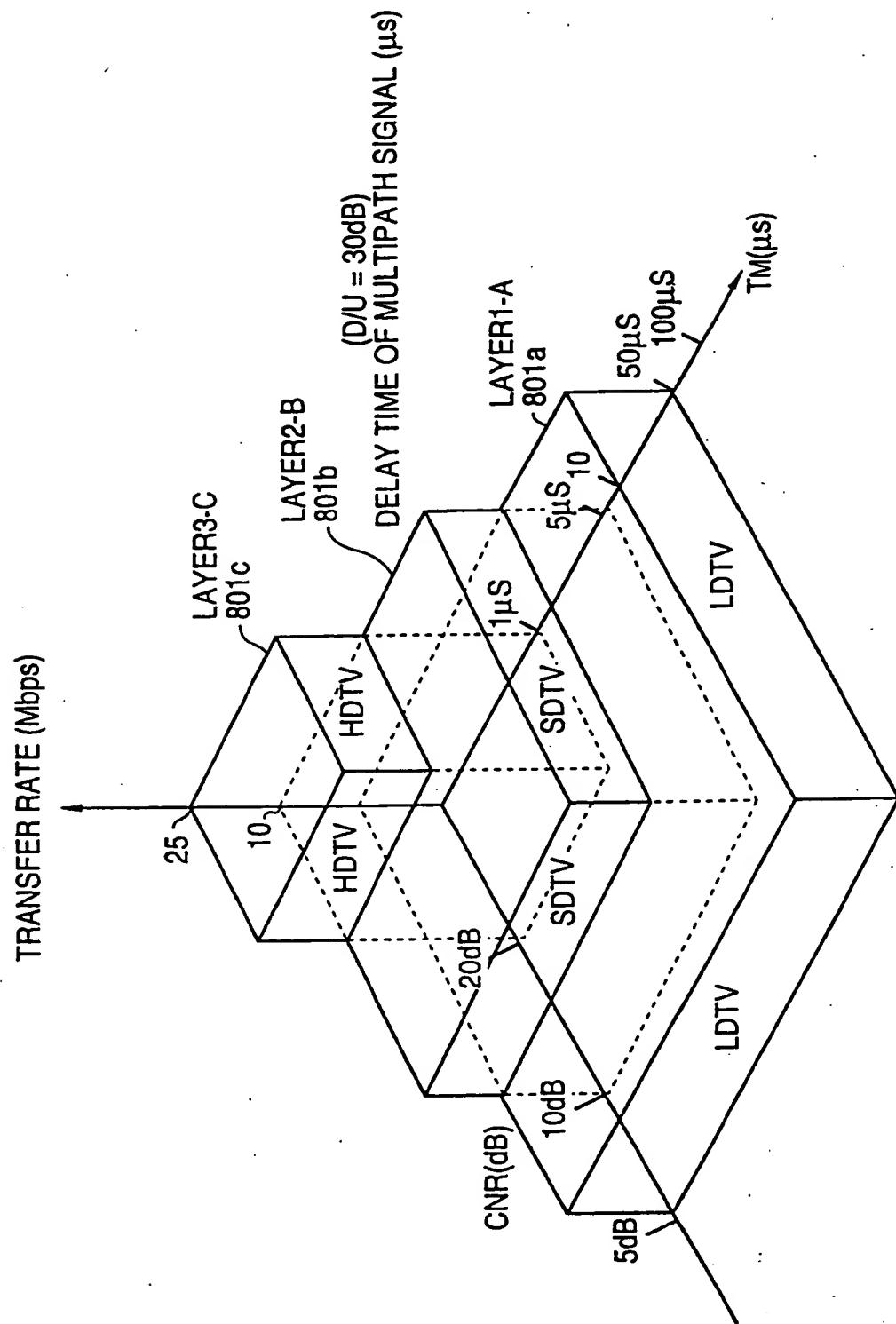


FIG. 153



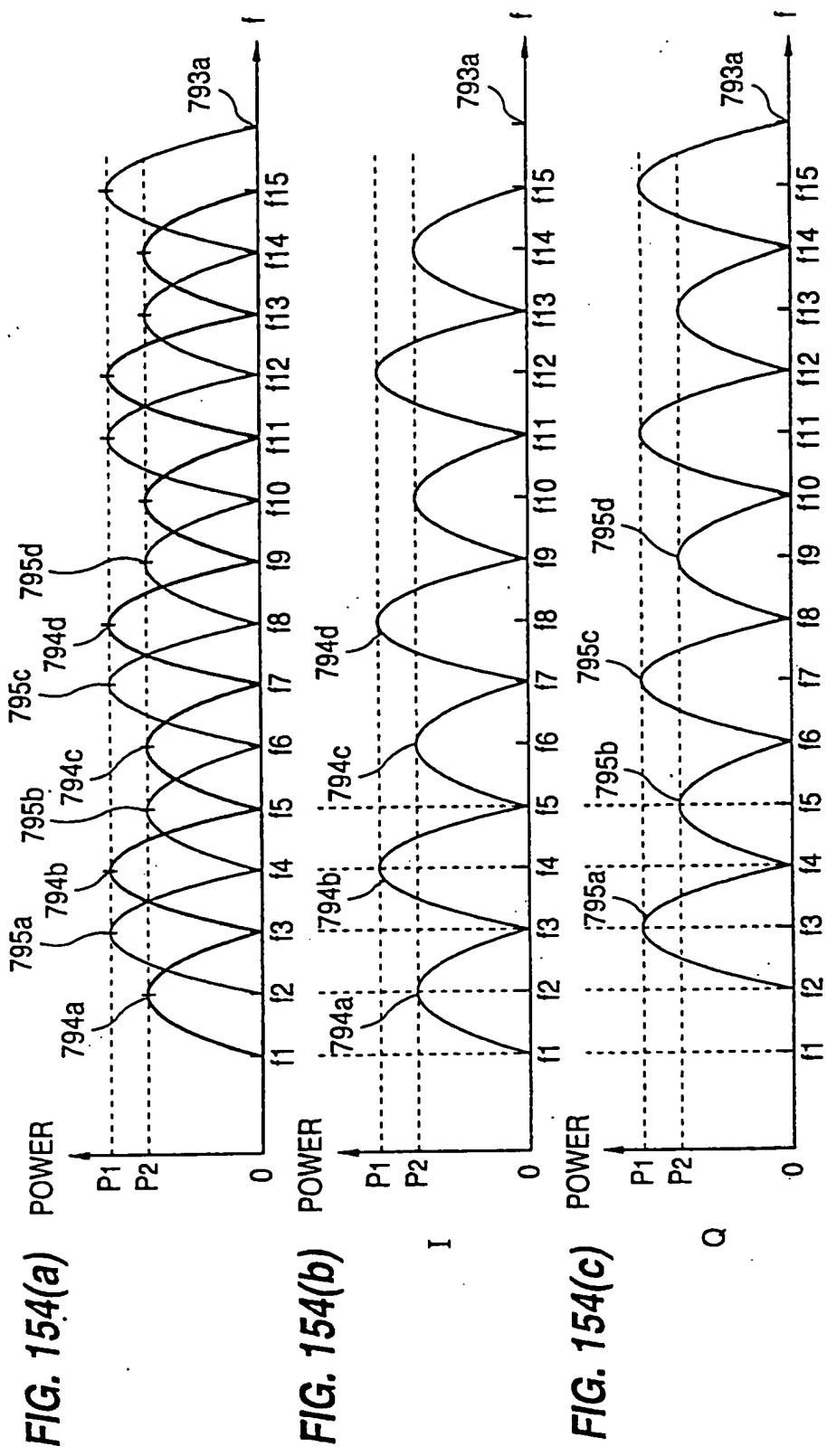


FIG. 155

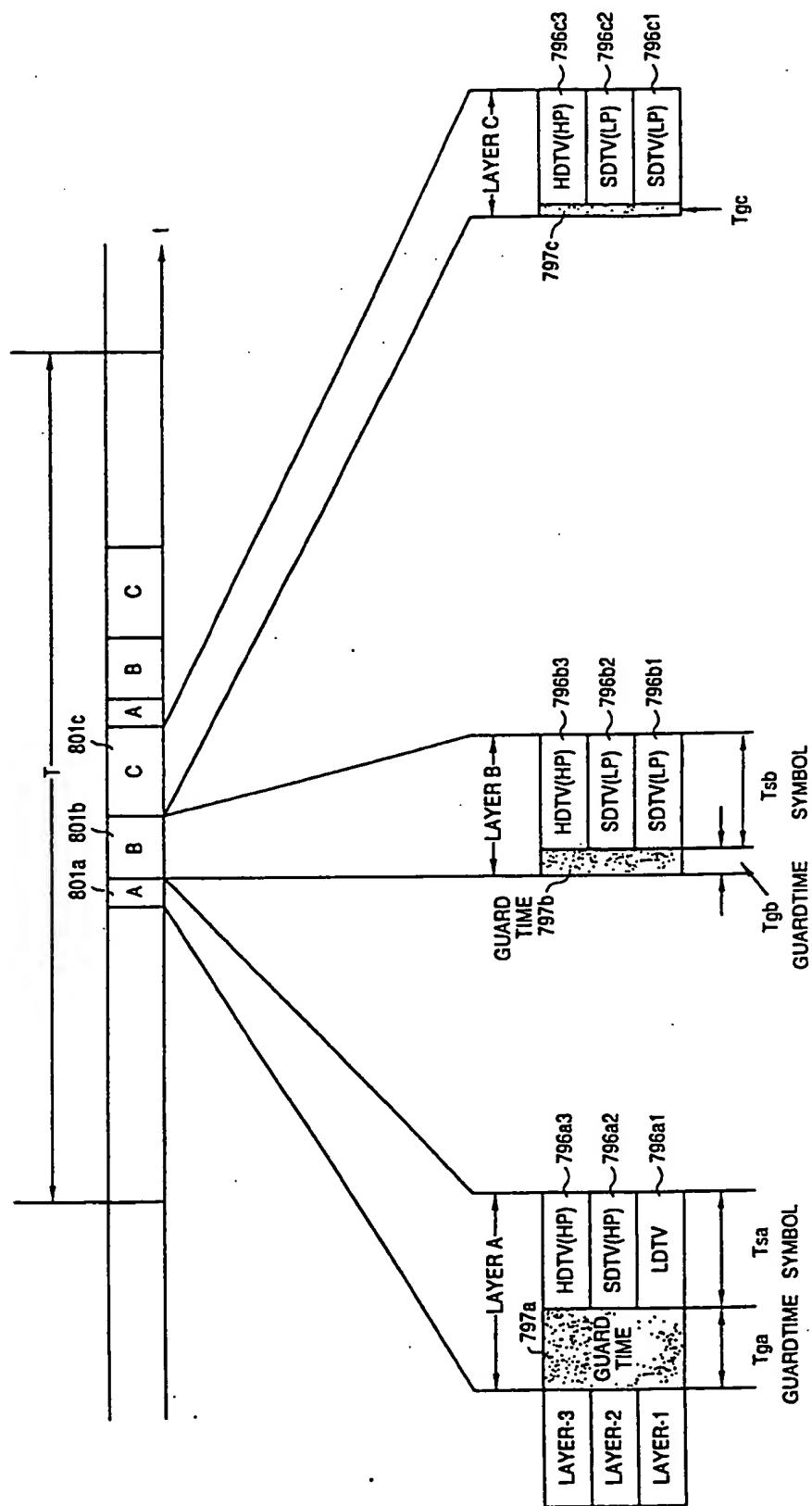


FIG. 156

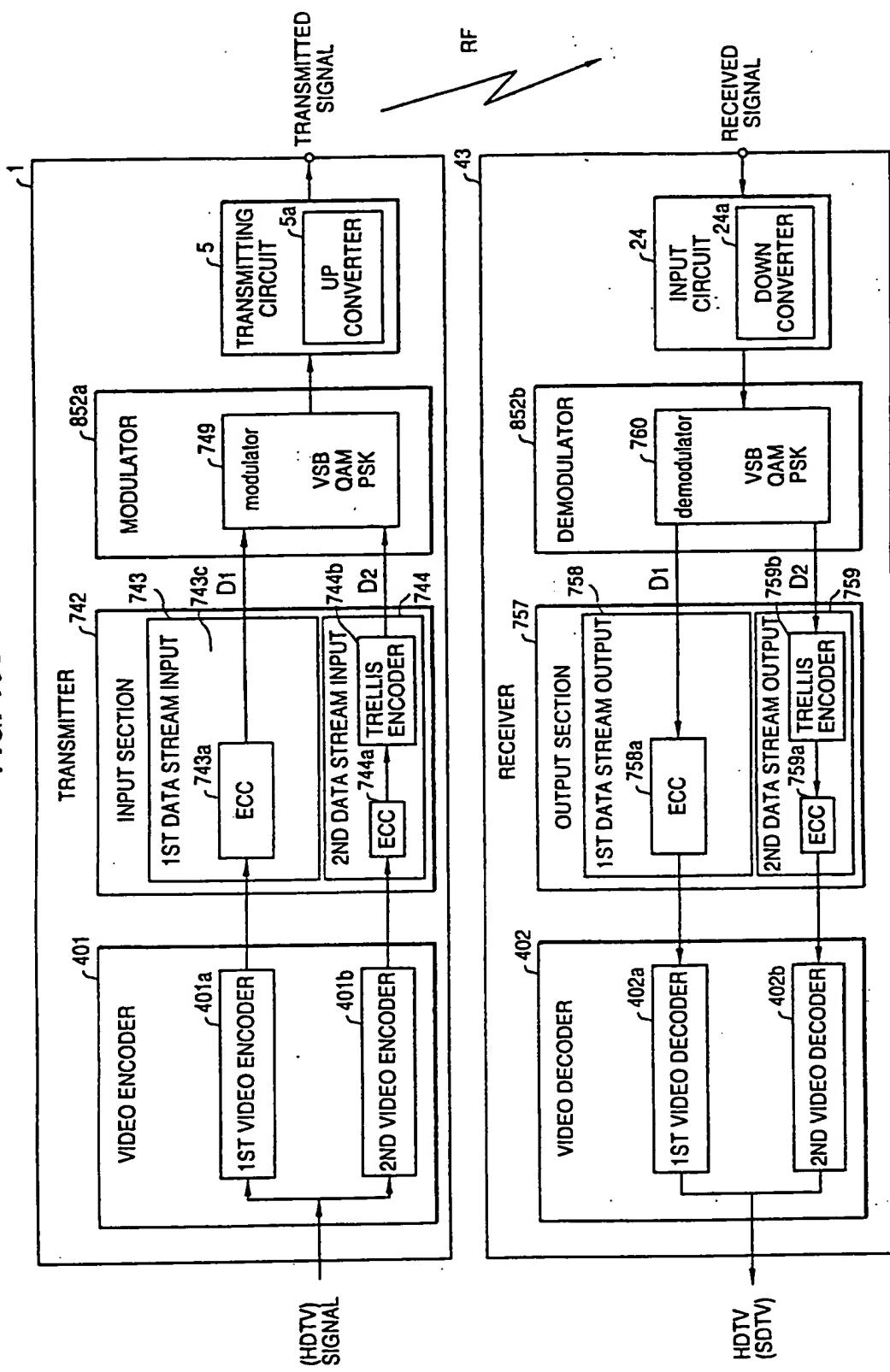


FIG. 157

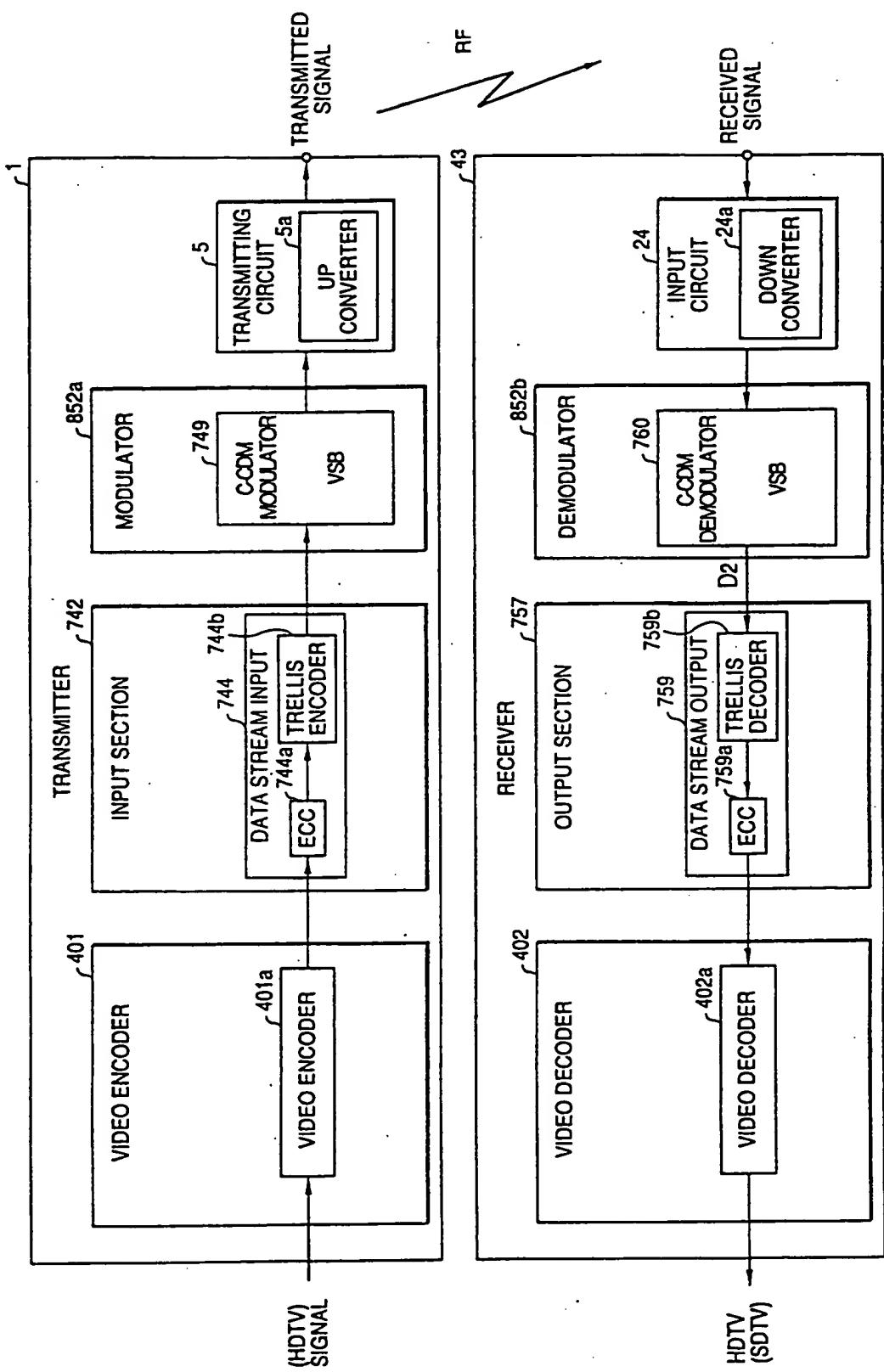
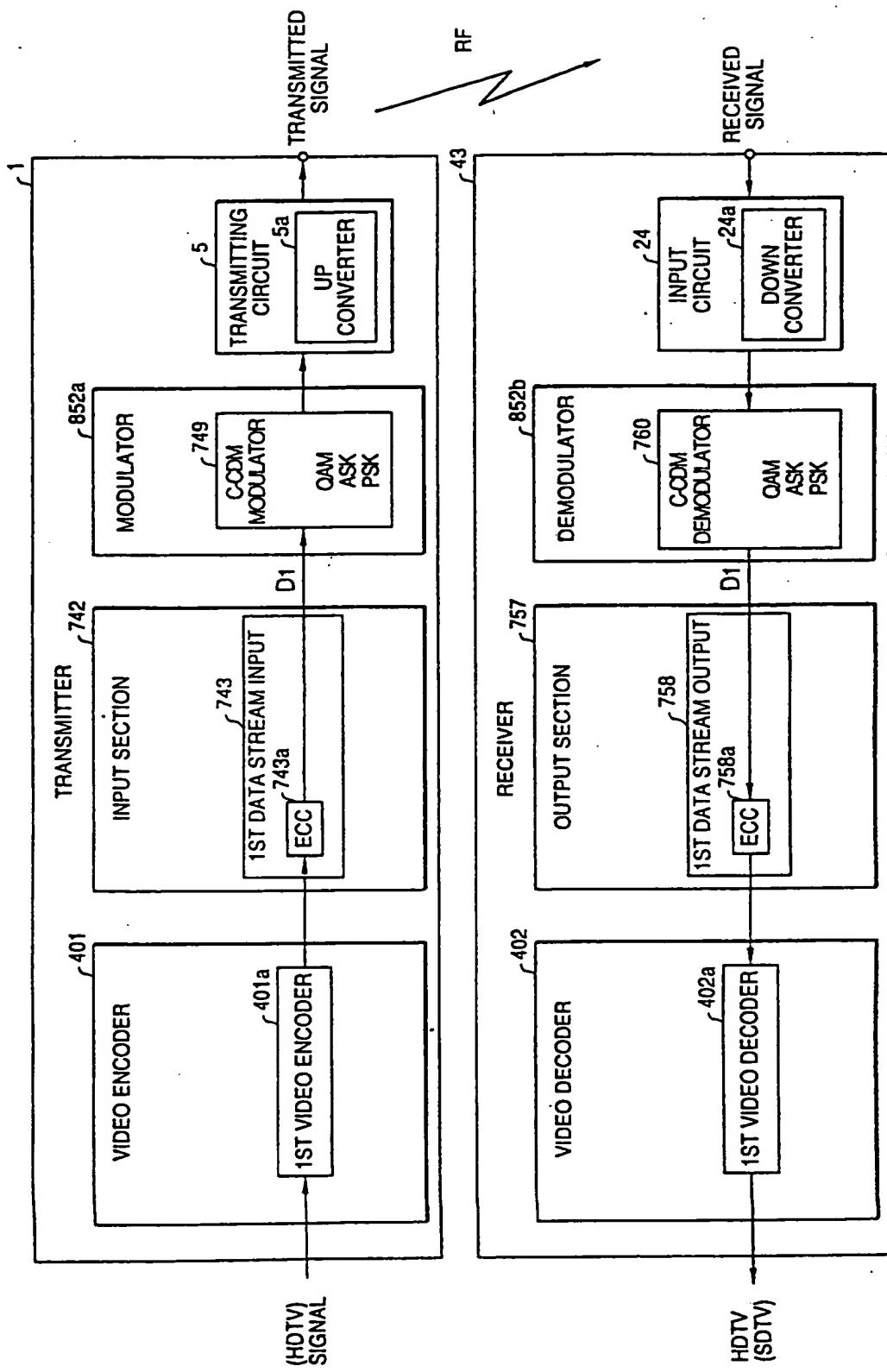
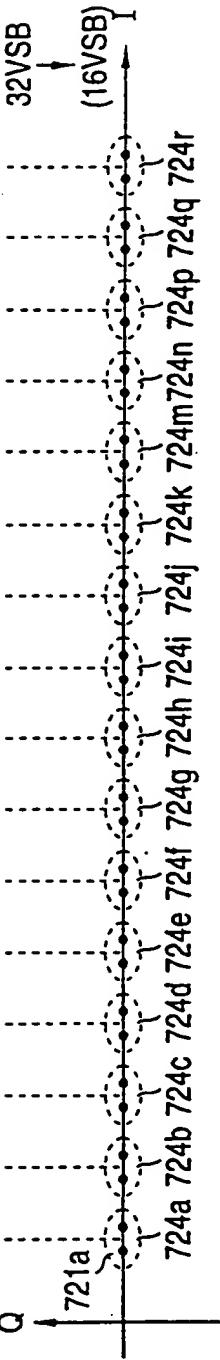
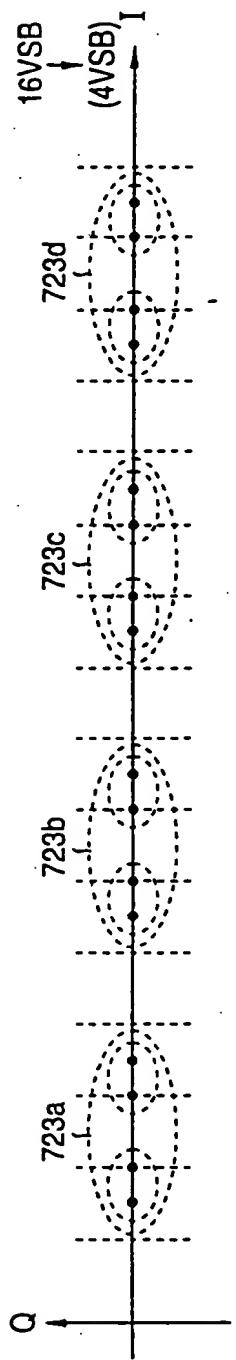
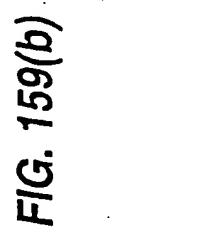
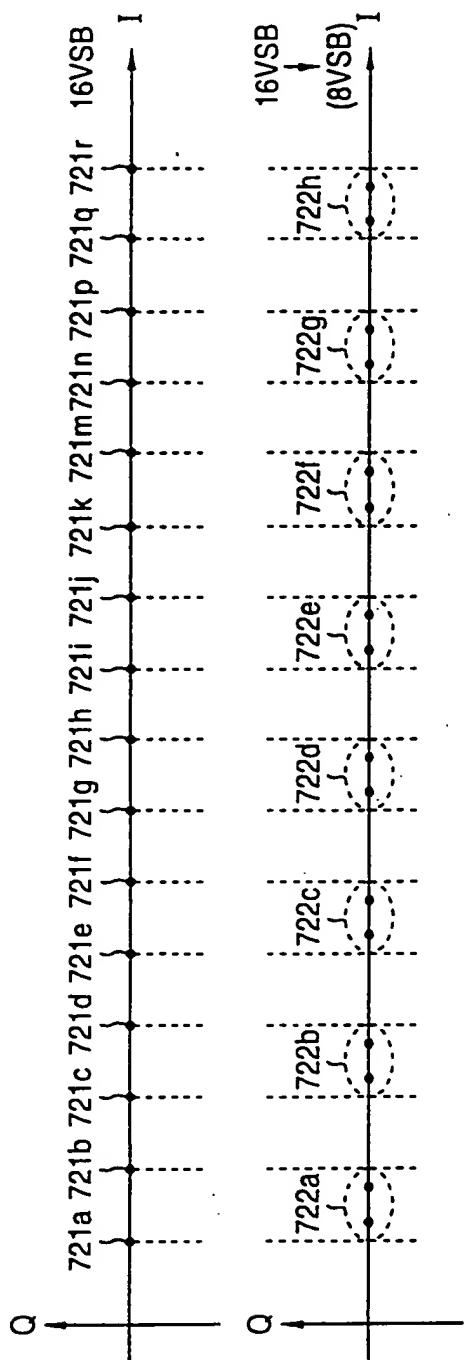


FIG. 158





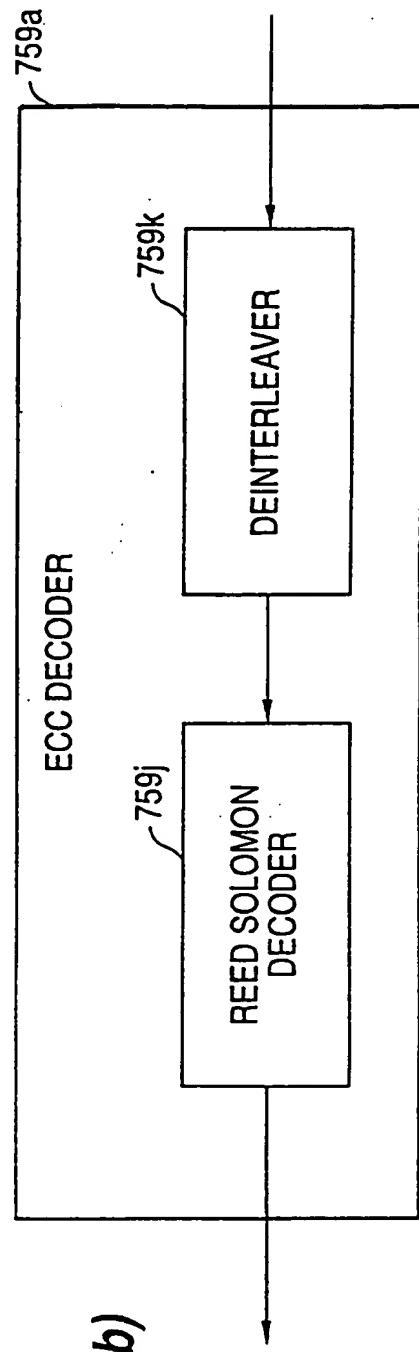
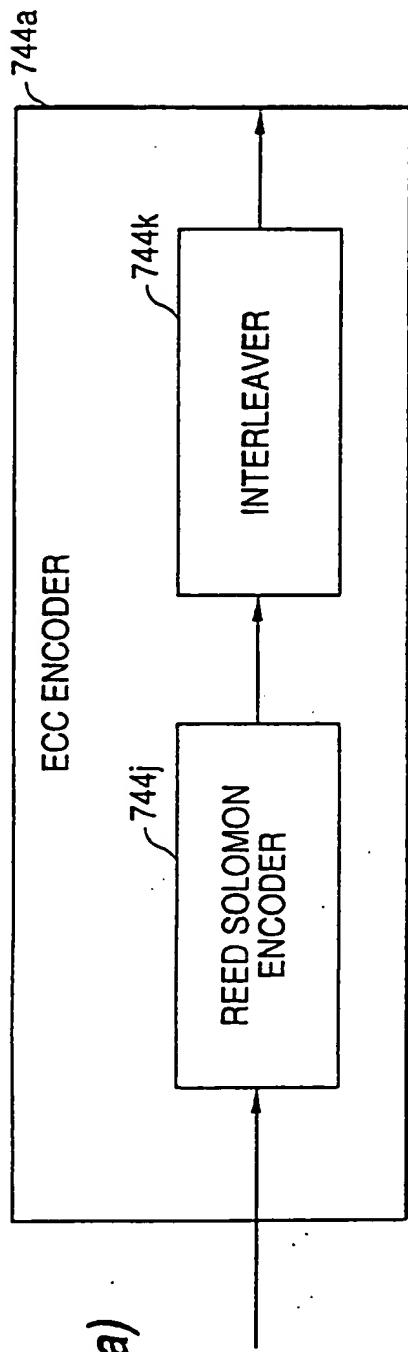


FIG. 161

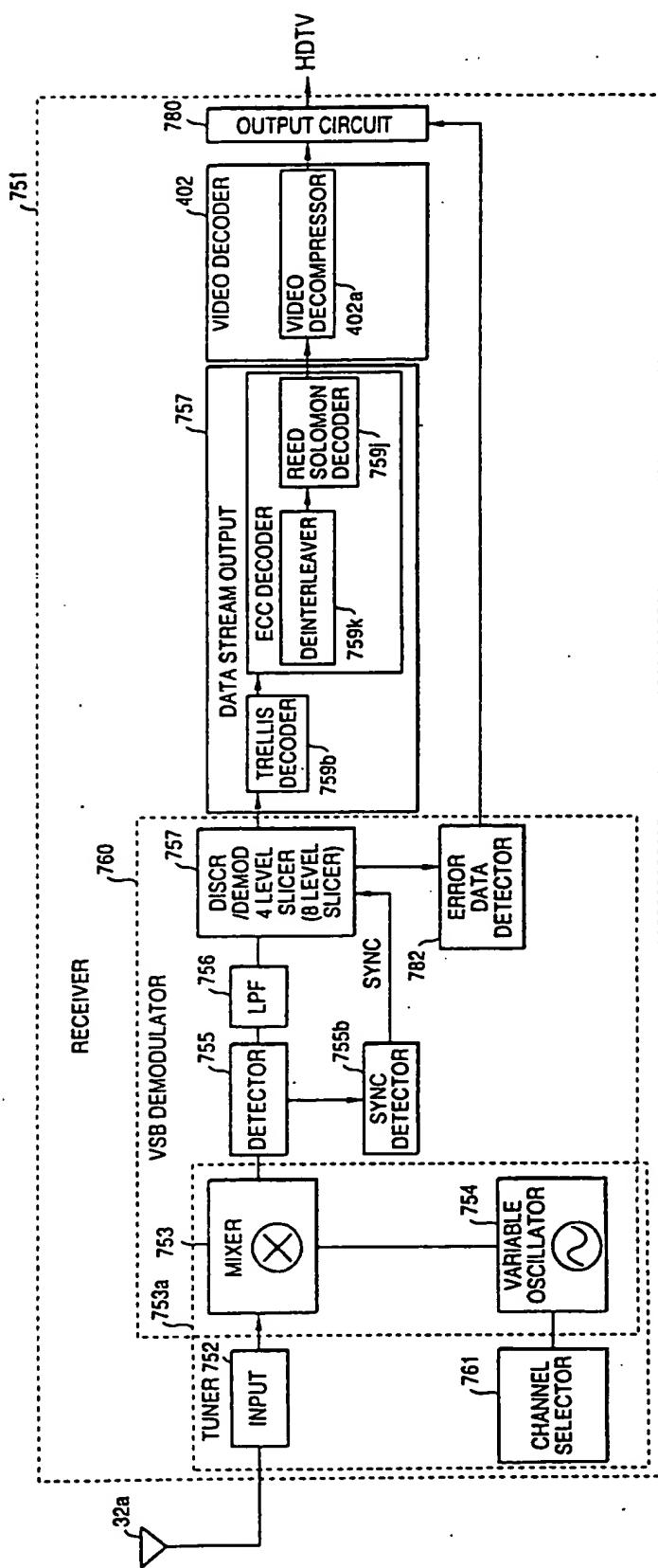


FIG. 162

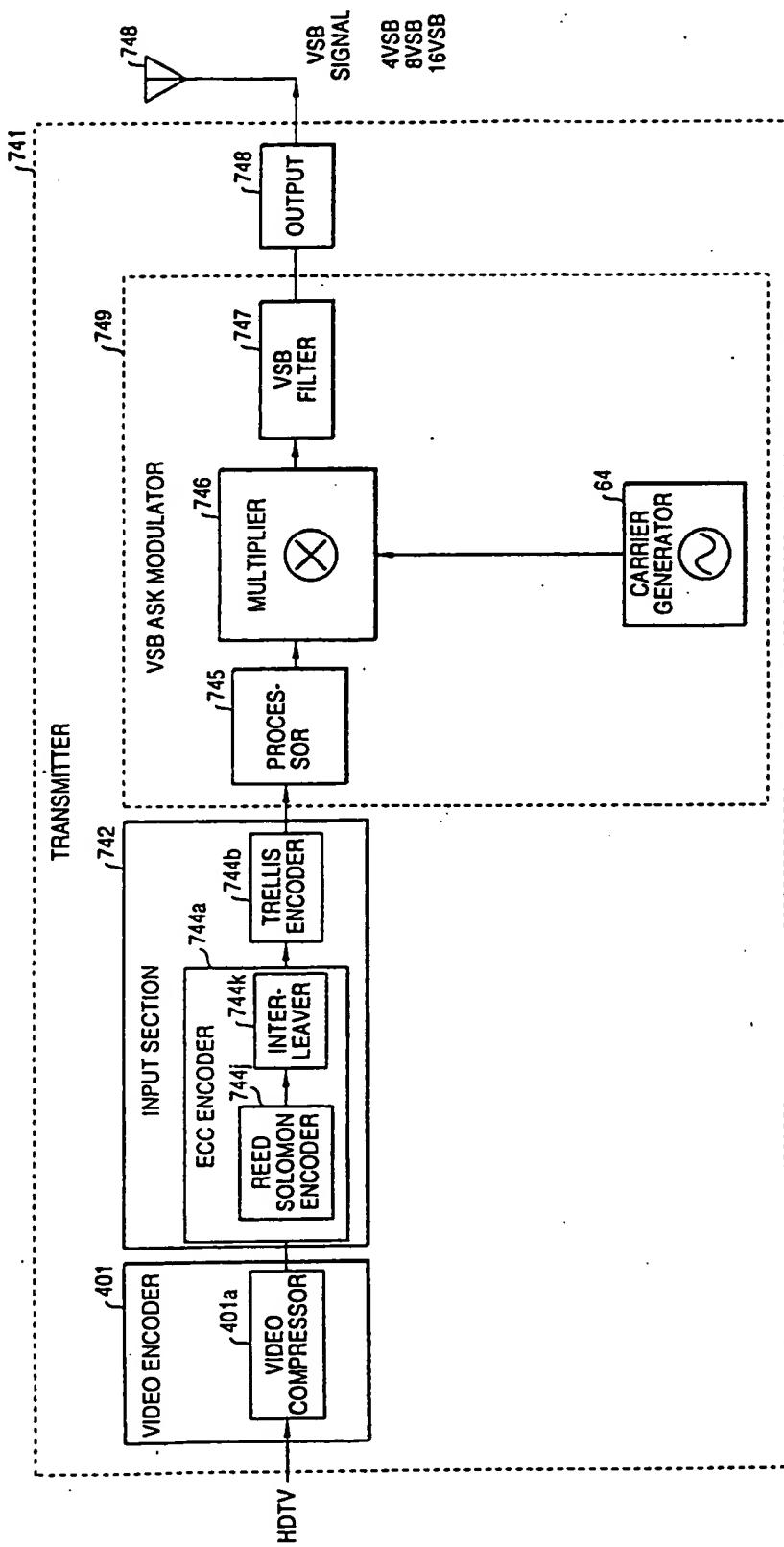


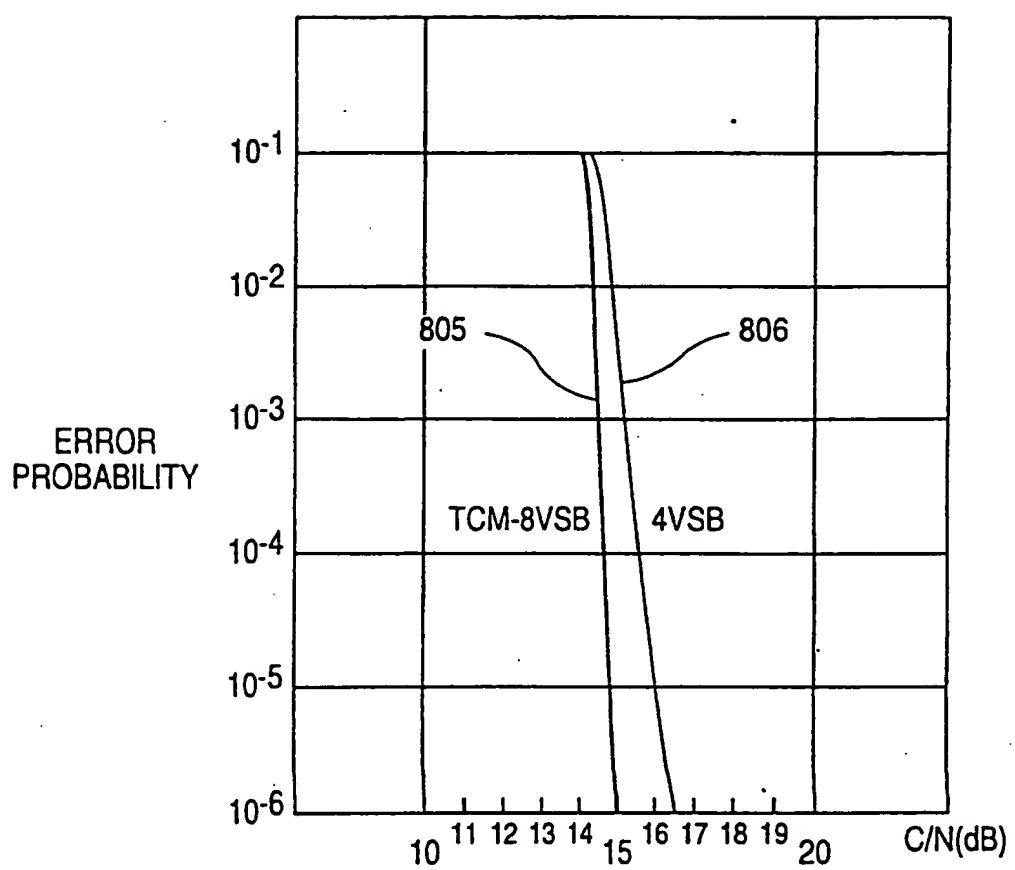
FIG. 163

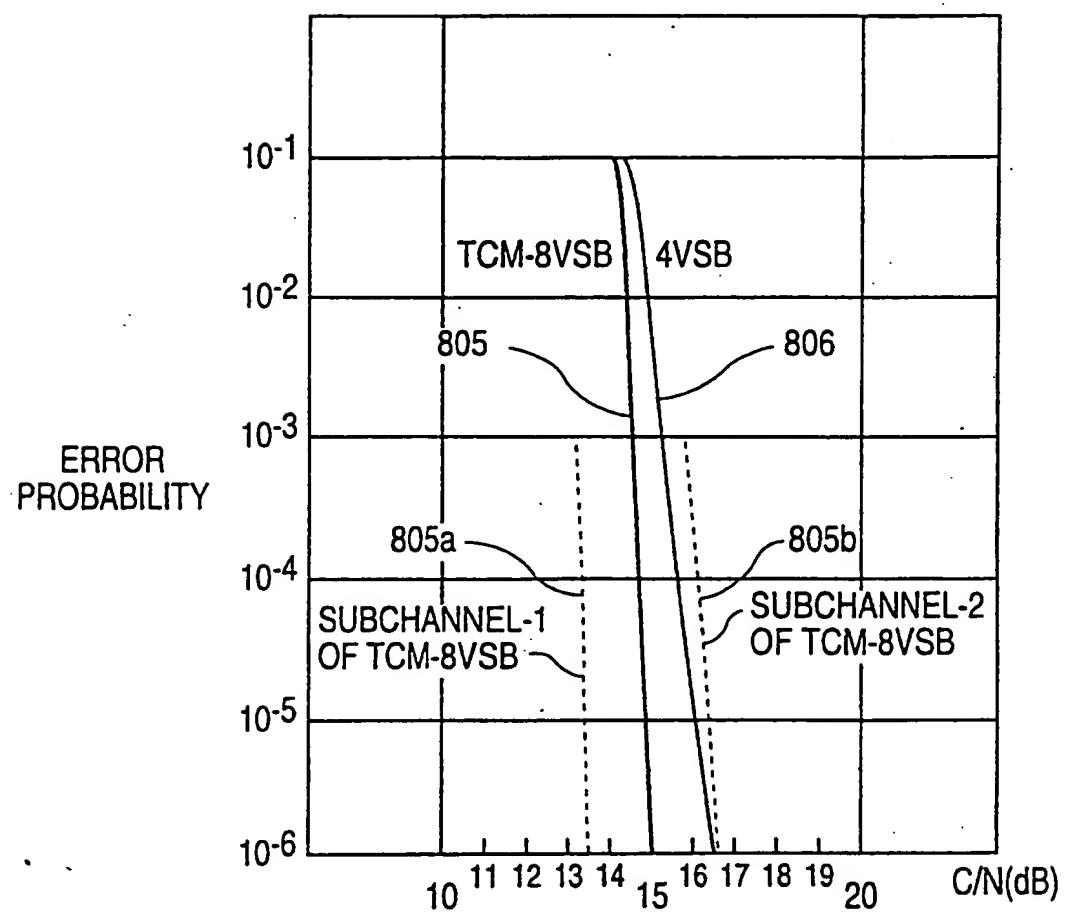
FIG. 164

FIG. 165(a)

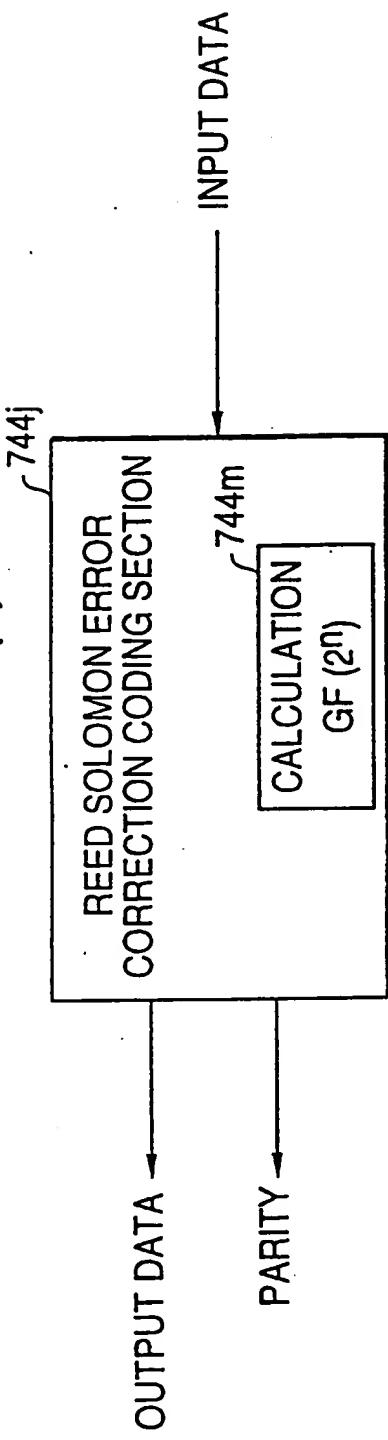


FIG. 165(b)

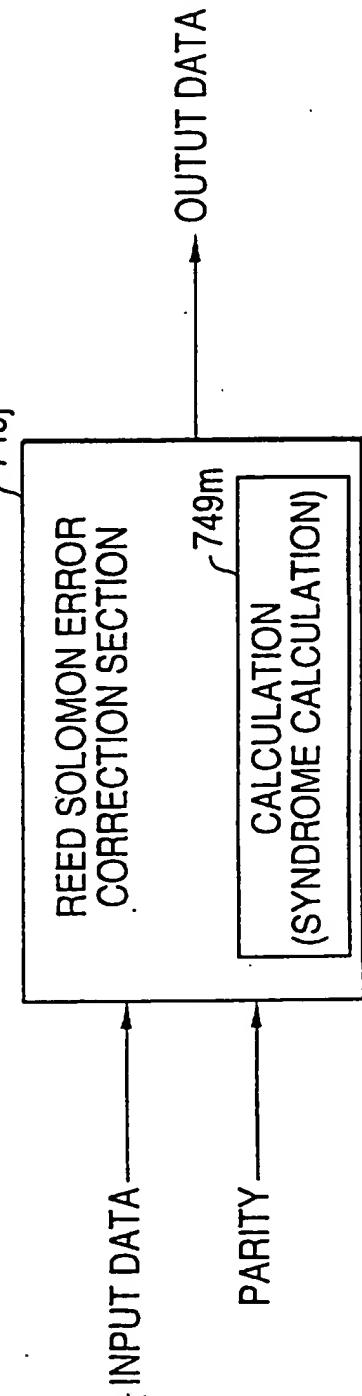


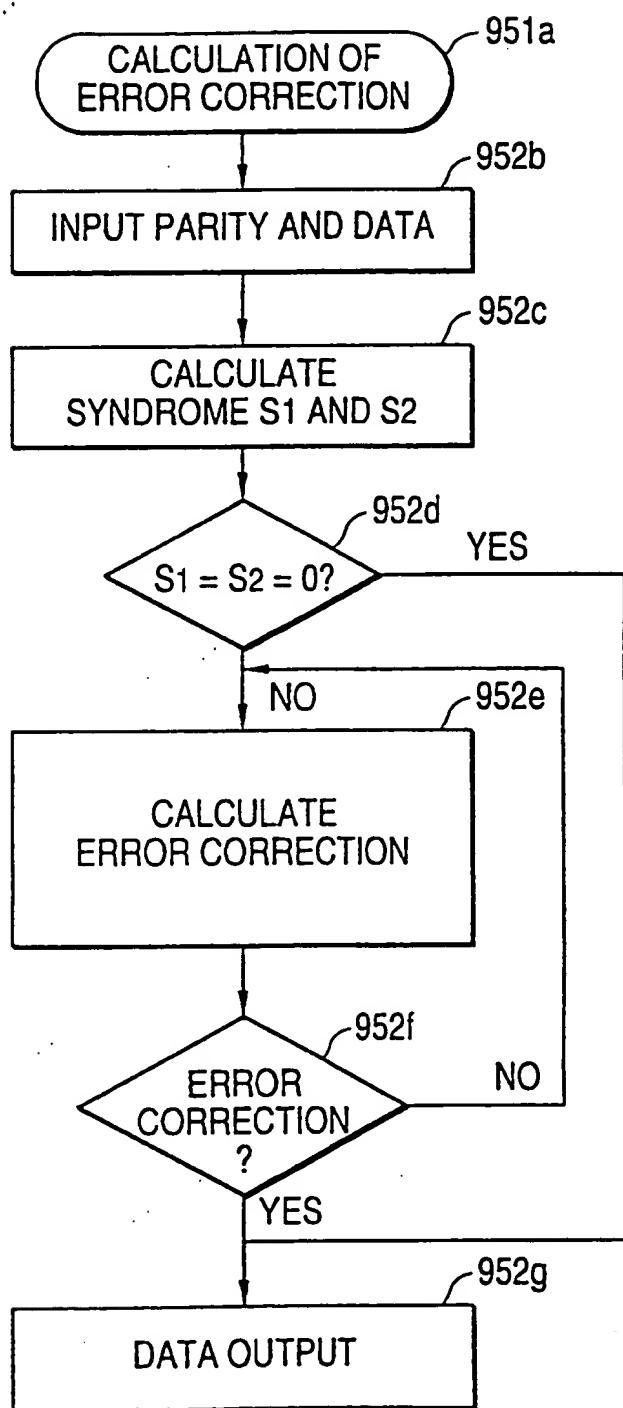
FIG. 166

FIG. 167

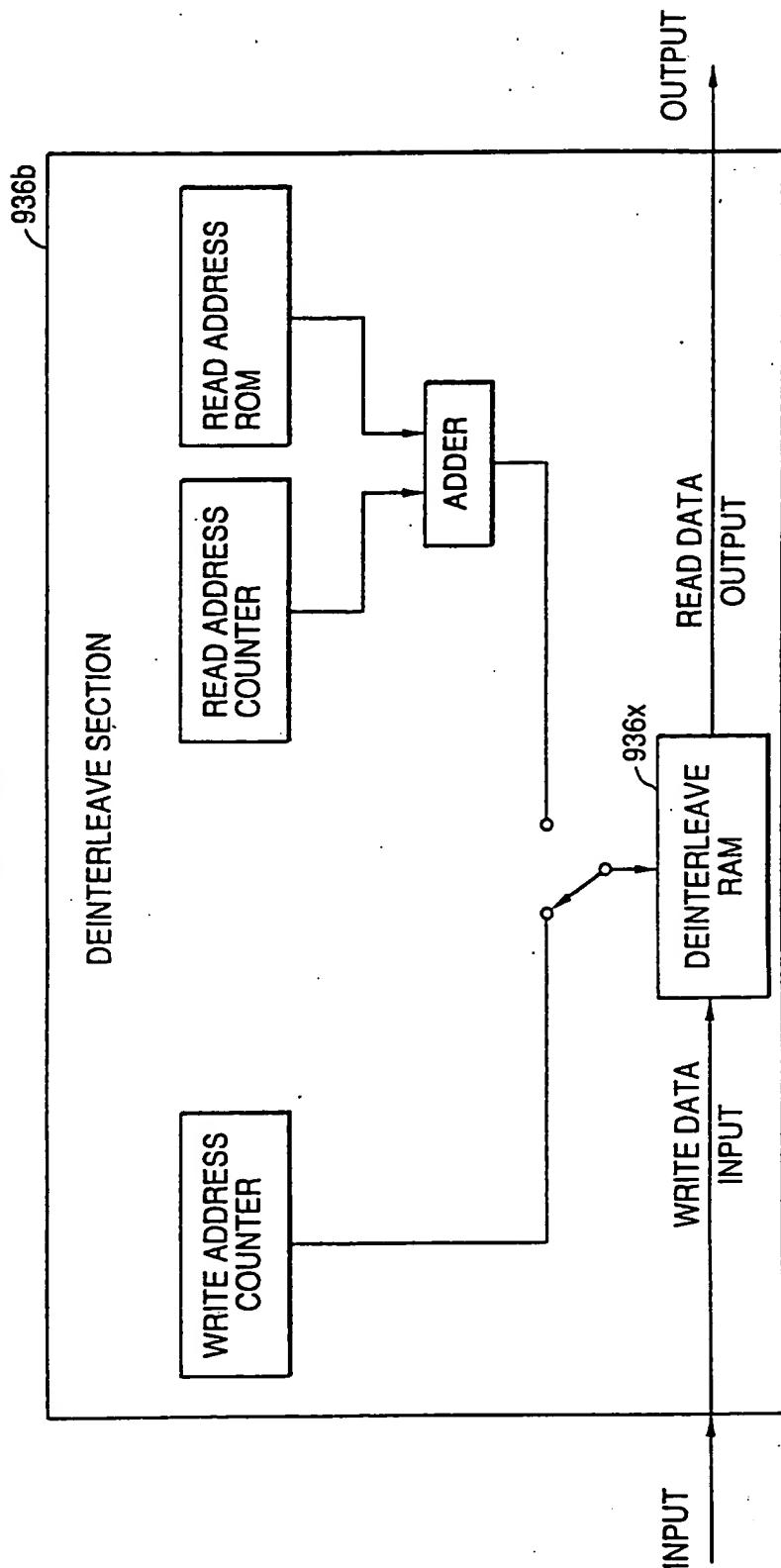


FIG. 168(a)

INTERLEAVE TABLE

	1	2	3	4	5	6	7	954
	DATA						C2 PARITY	951a
1	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆	PARTY	951b
2	B ₁	B ₂	B ₃	B ₄				
3	C ₁							
4	D ₁							
5	E ₁							
6	F ₁							
C1 PARITY								

953

FIG. 168(b)

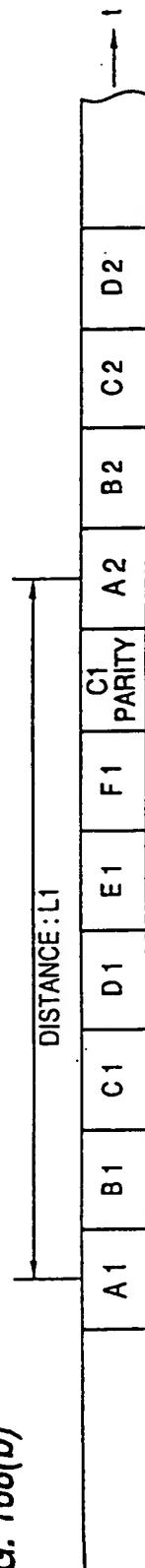


FIG. 169 (Amended)

COMPARISON OF REDUNDANCY

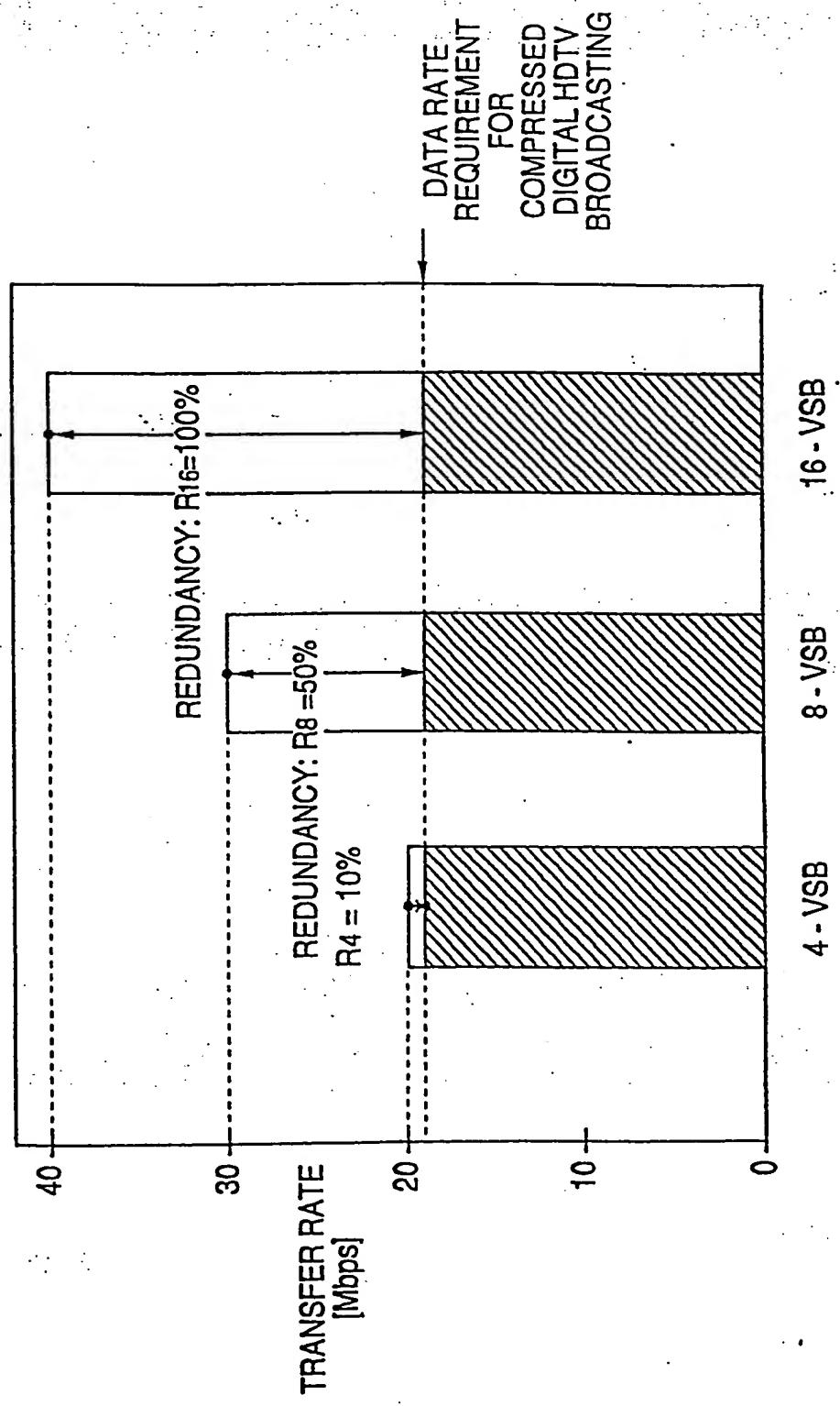


FIG. 170

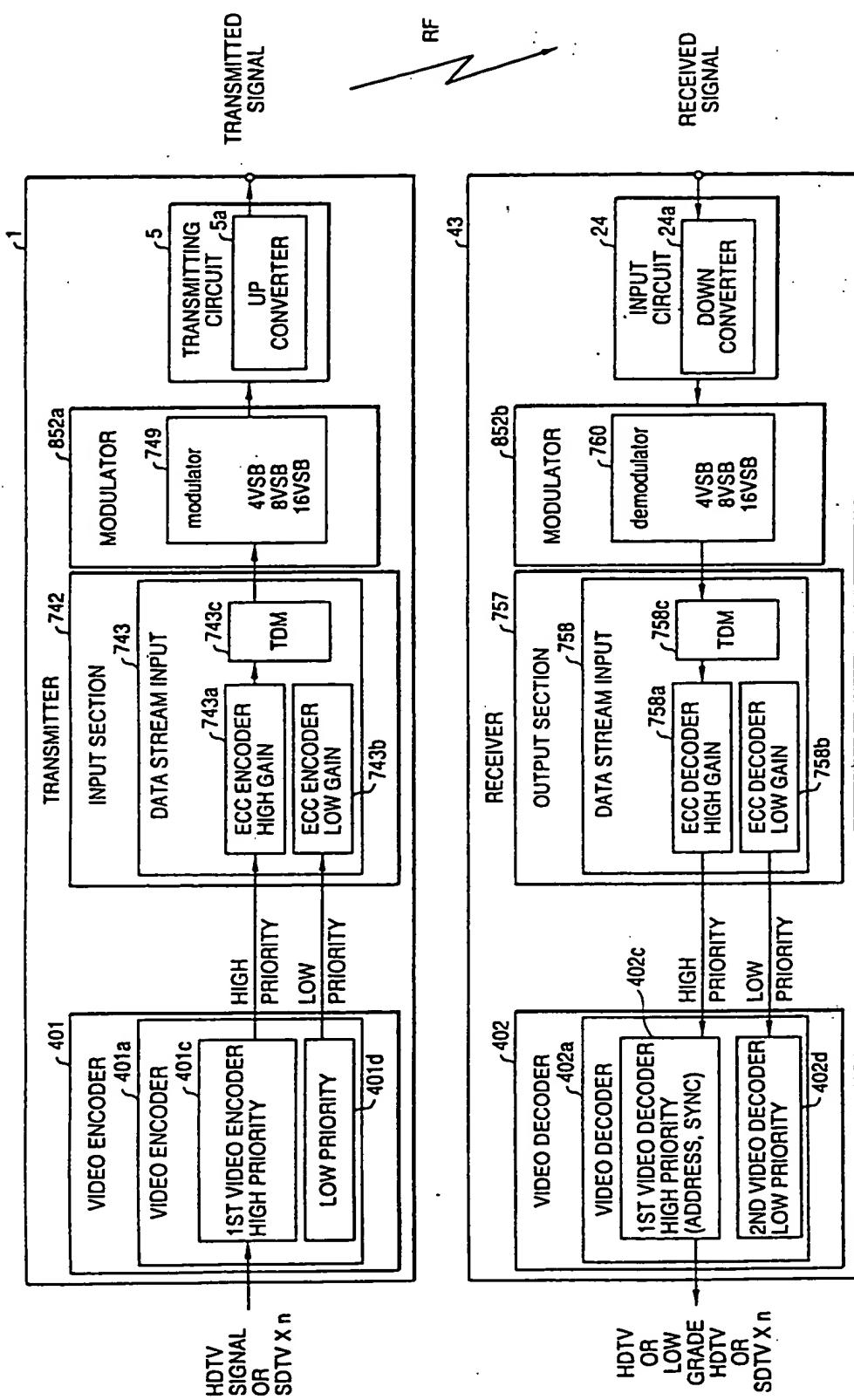


FIG. 171

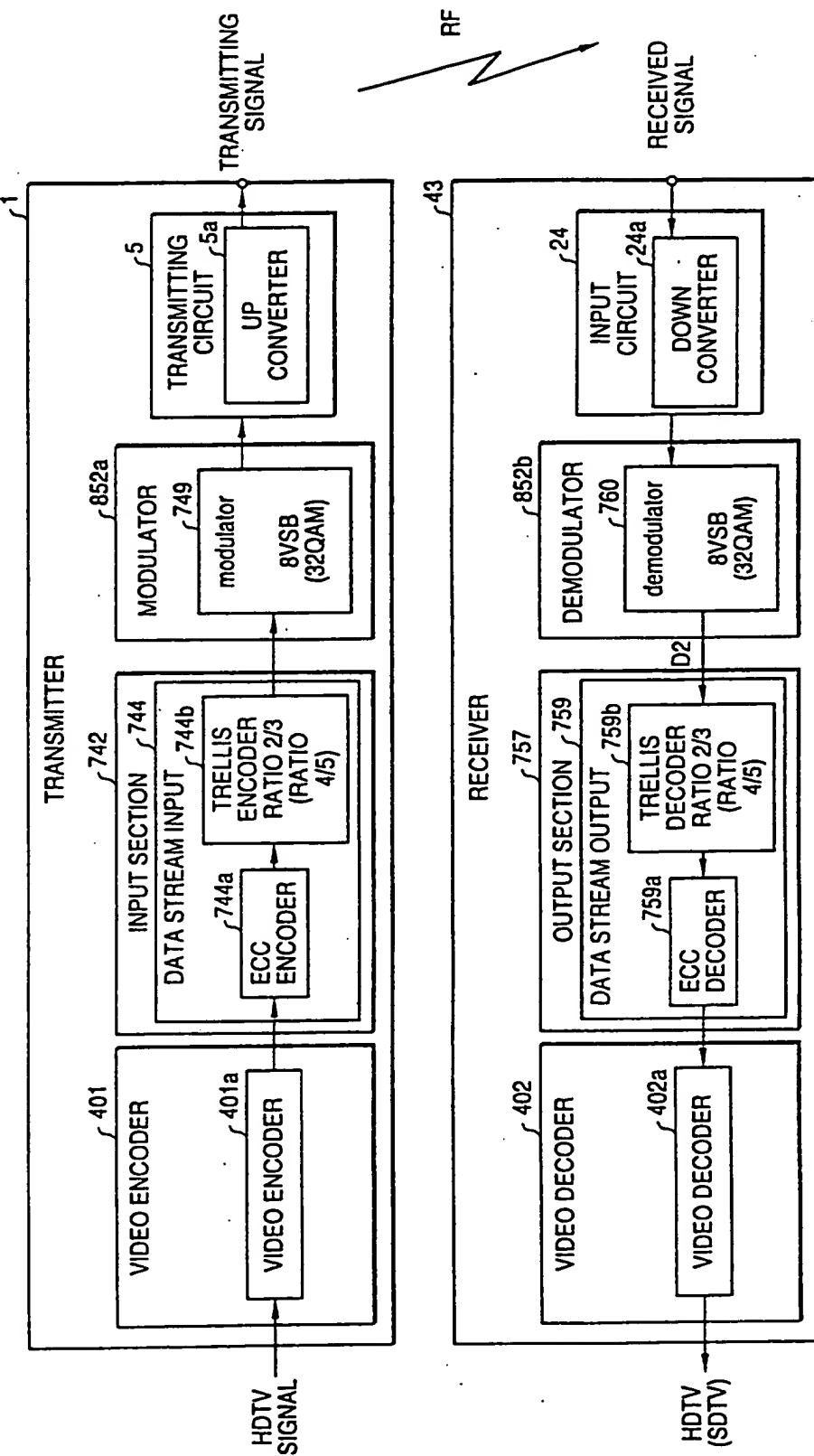
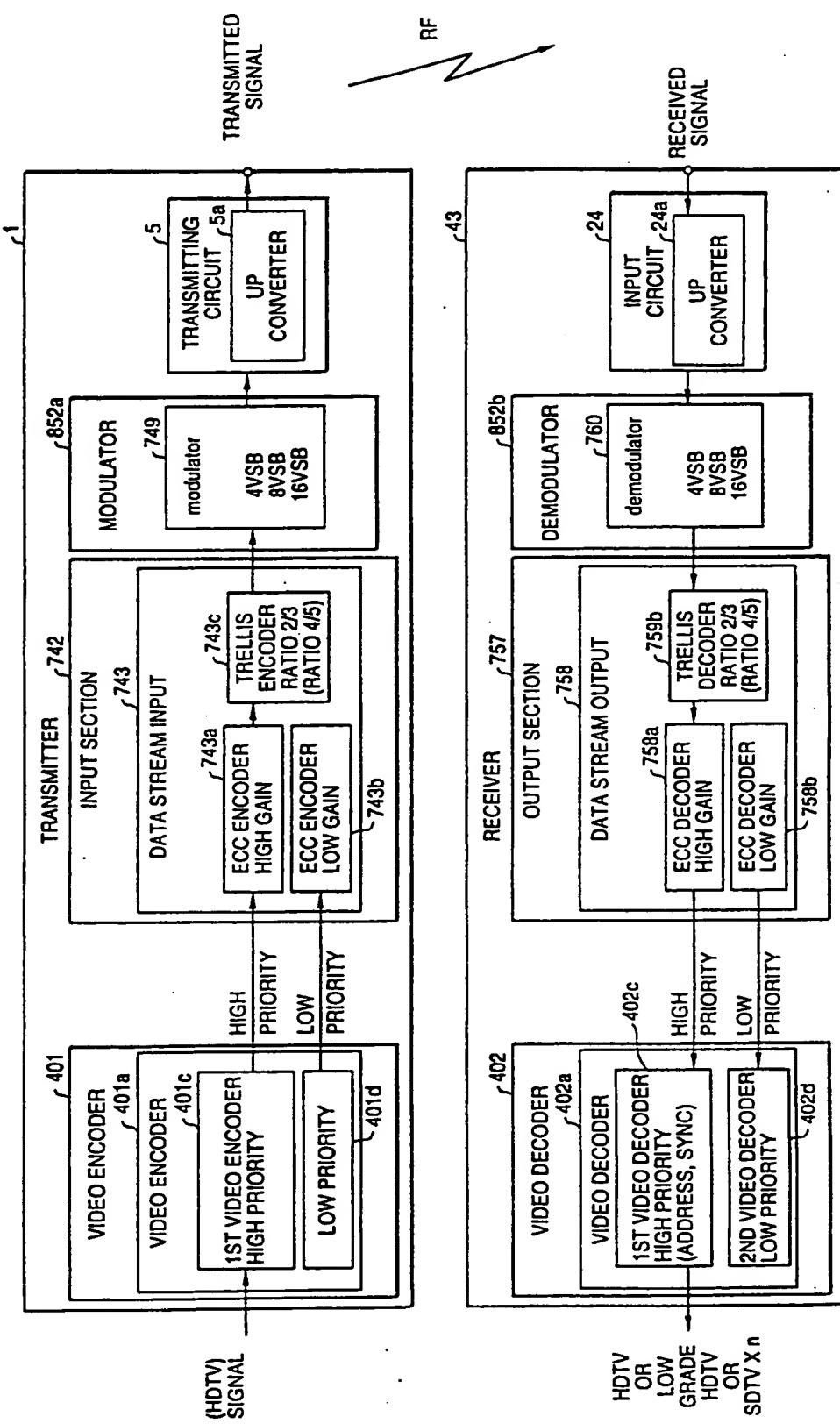


FIG. 172



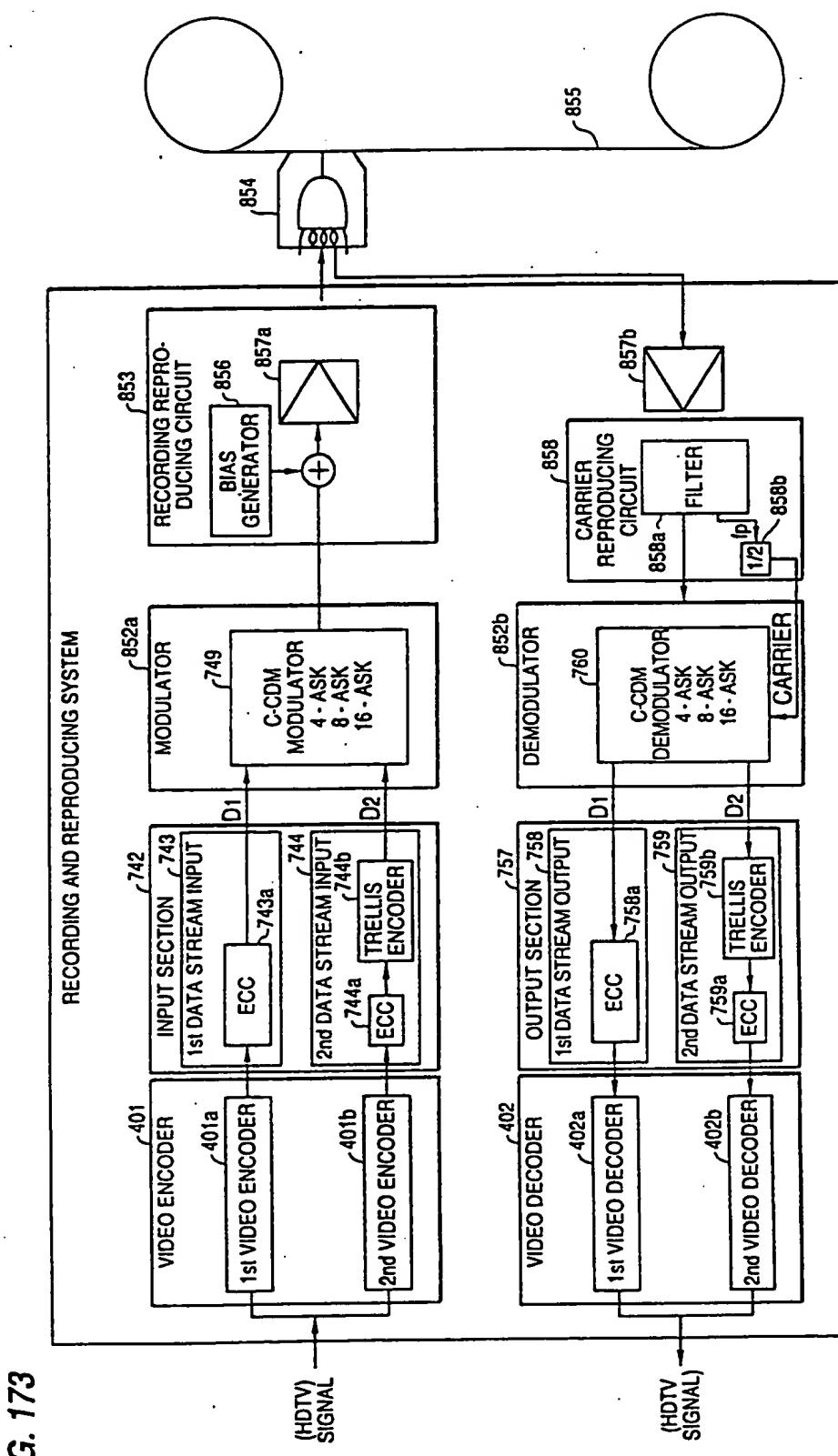


FIG. 173

FIG. 174

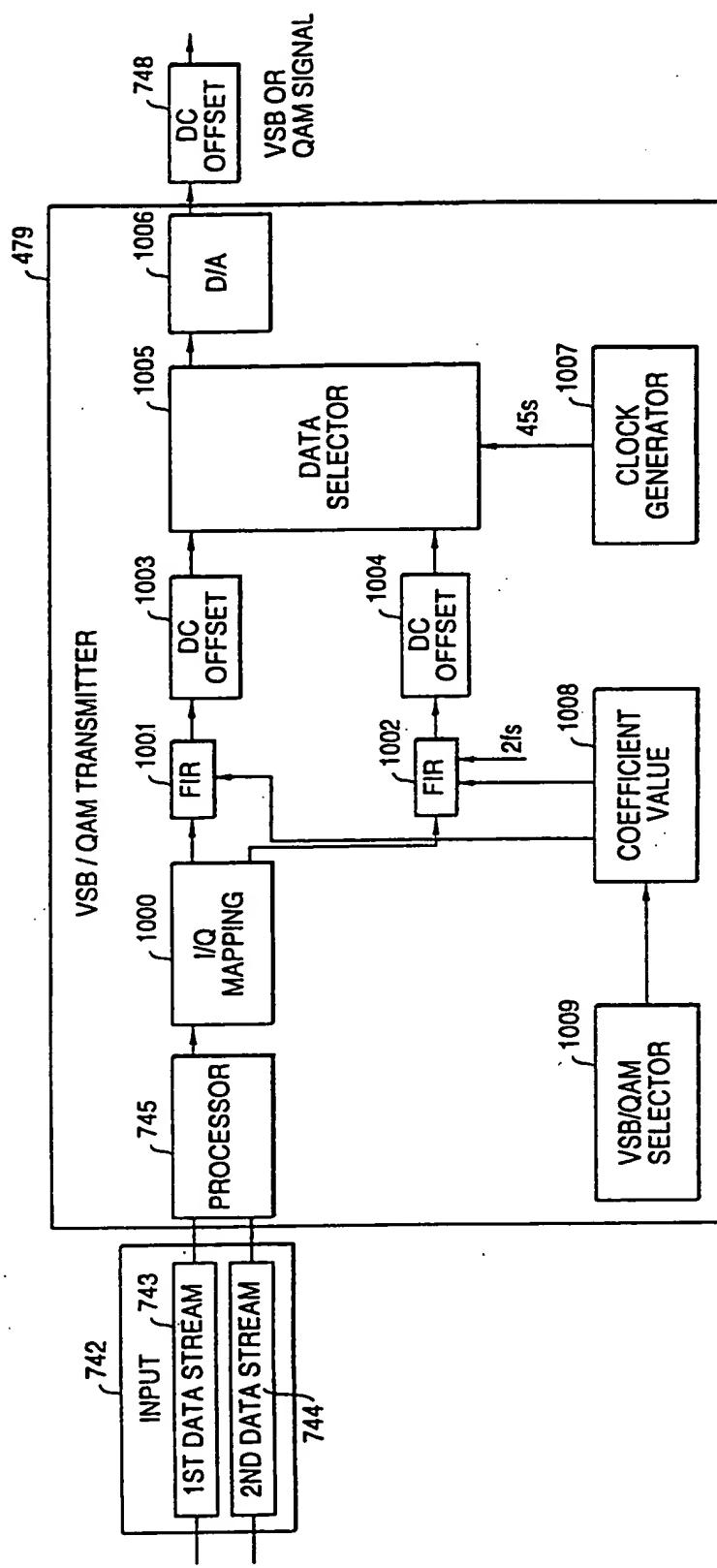


FIG. 175

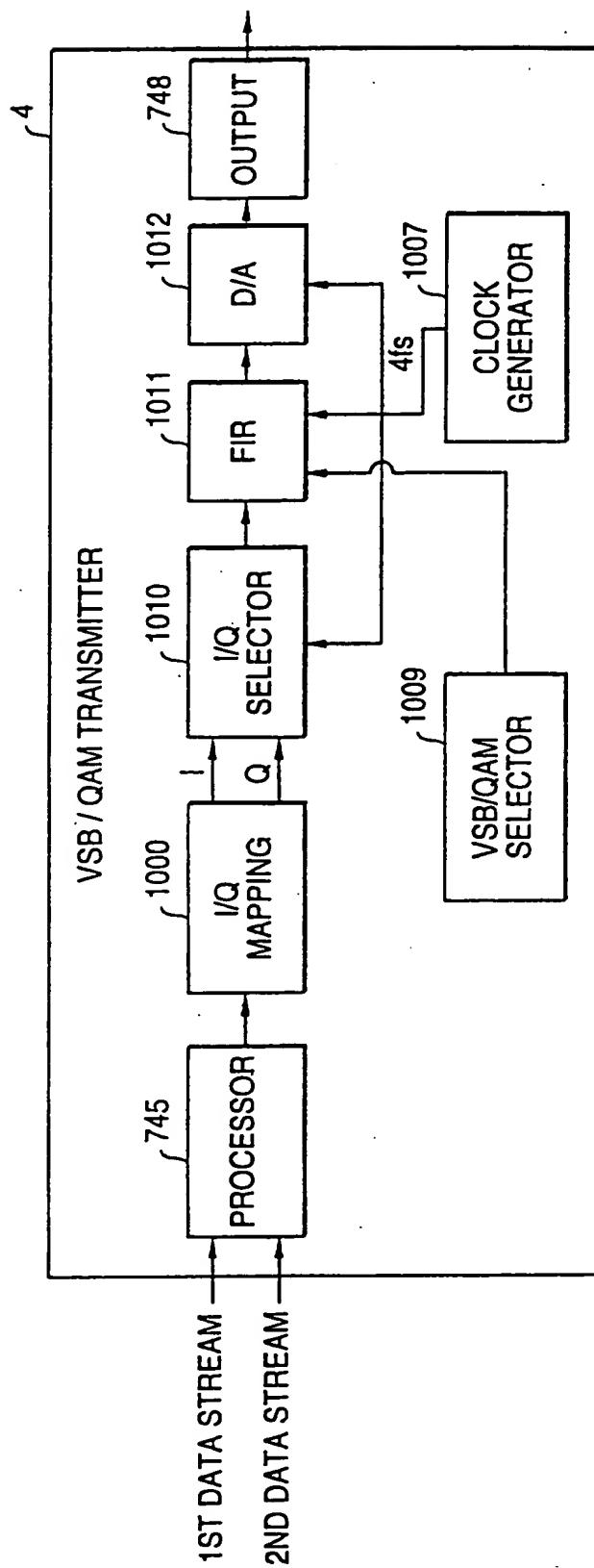


FIG. 176

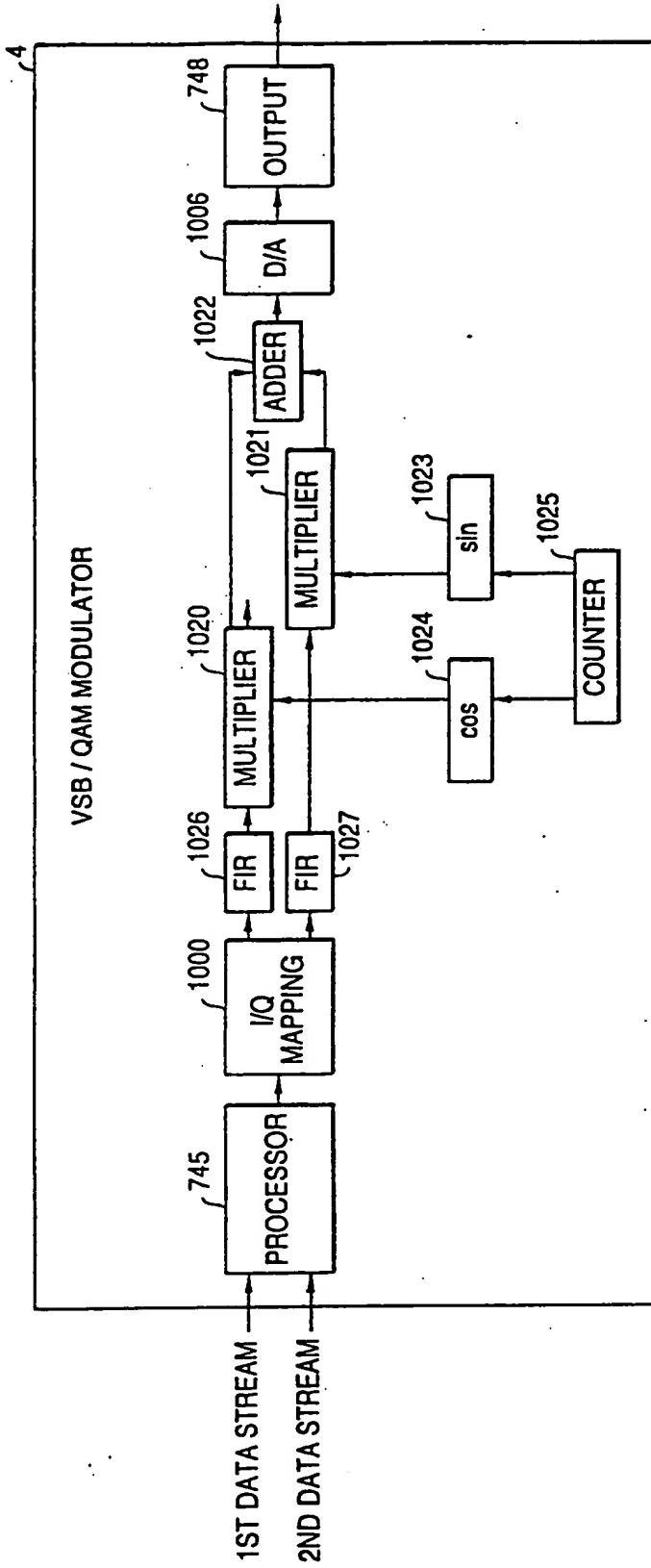


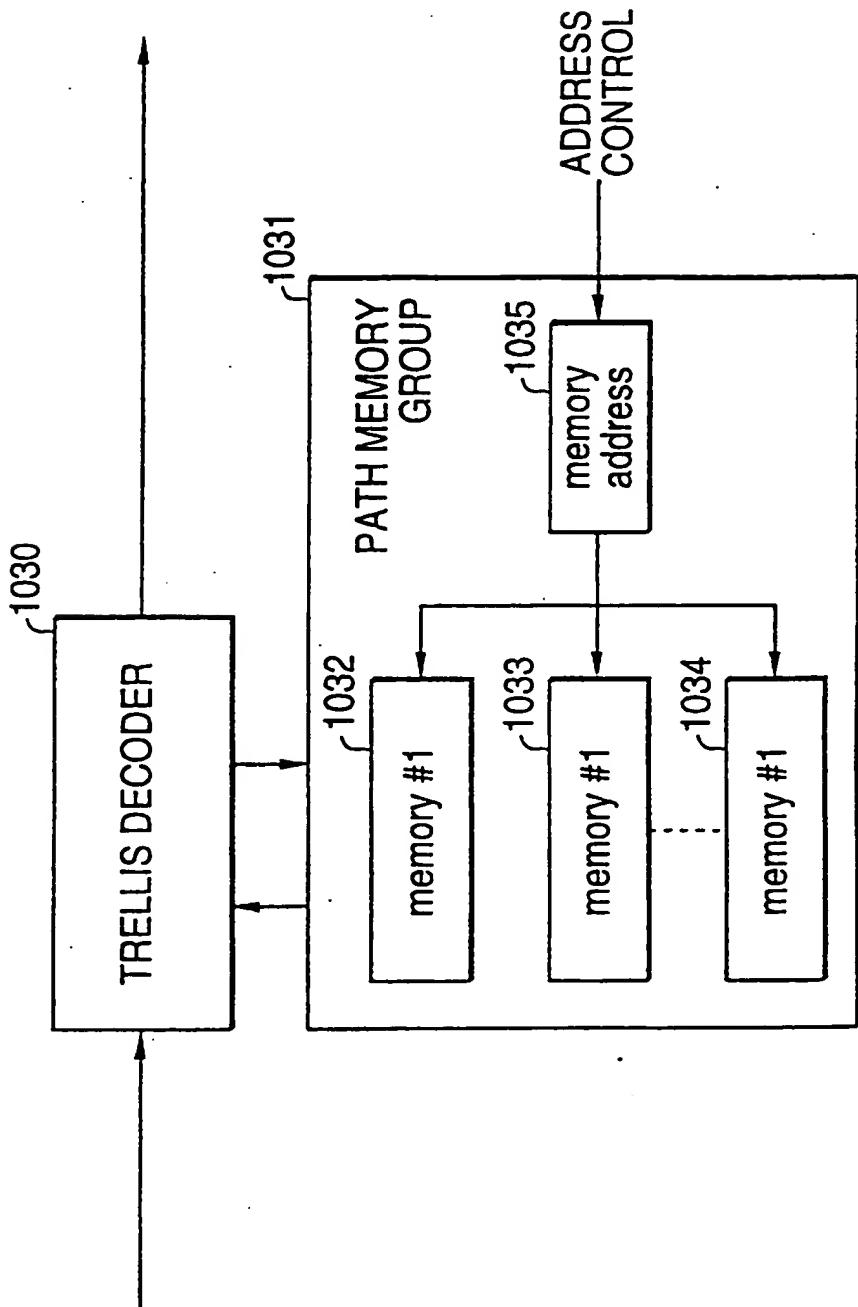
FIG. 177

FIG. 178

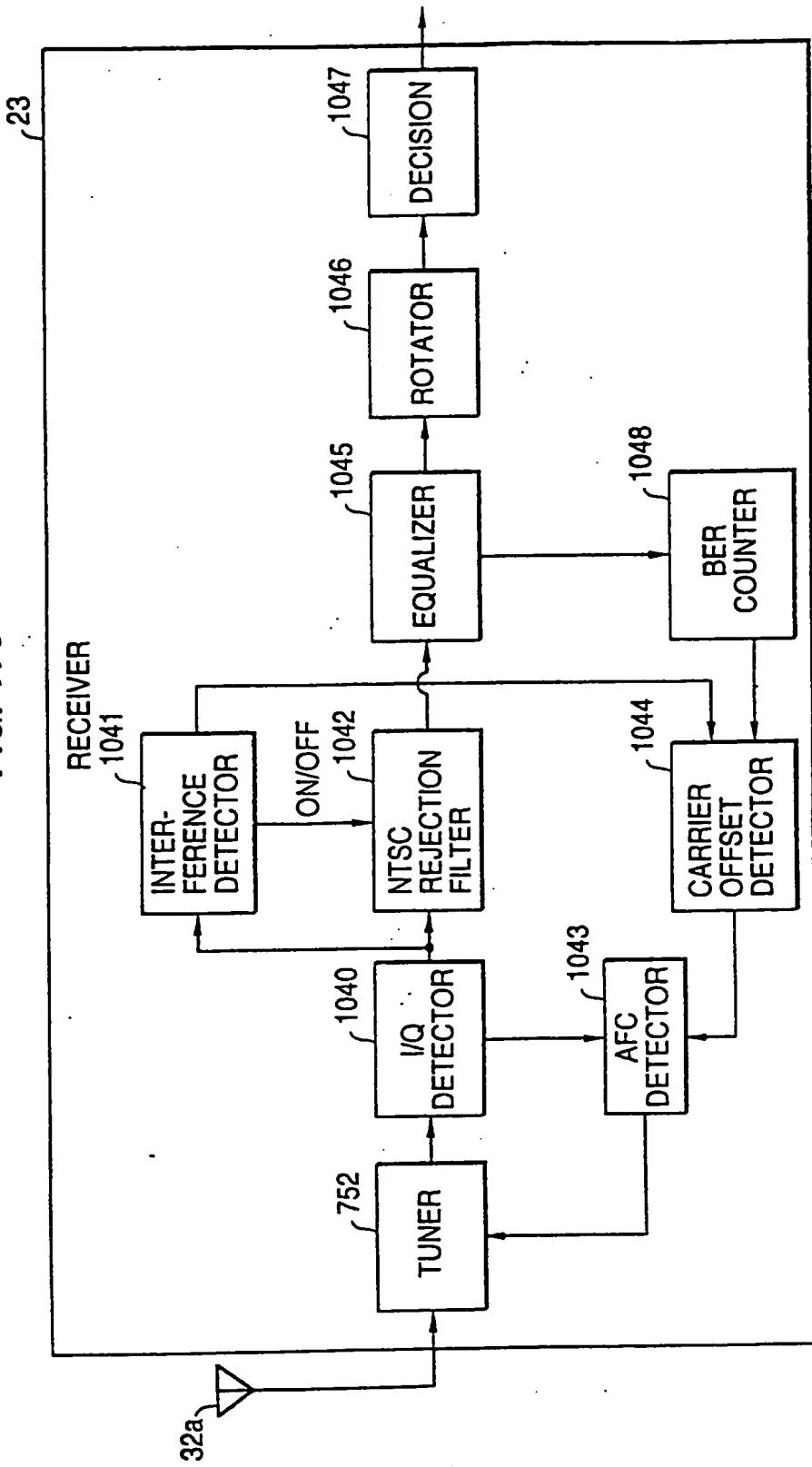


FIG. 179

